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Connecticut Dept of Environmental Protection, Hartford

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ECONOMIC LAW ENFORCEMENT

VOLUME IV

STRENGTHENING ENVIRONMENTAL LAW ENFORCEMENT: ILLEGAL FILLING

The Judges, (detail American woodcut, 19th Century).

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CONNECTICUT ENFORCEMENT PROJECT

U.S. ENVIRONMENTAL PROTECTION AGENCY

SEPTEMBER, 1975

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To Whom It May Concern:

the report is describing

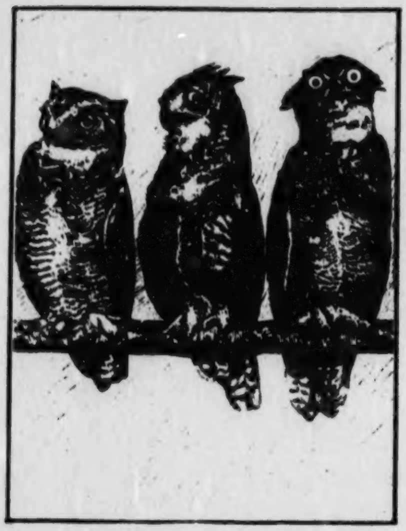
The accompanying four volumes are part of a six-volume set ~~entitled~~ "Economic Law Enforcement" which has been prepared by the Connecticut Department of Environmental Protection. ~~They describe~~ a promising approach to the enforcement of environmental laws now being implemented and tested in Connecticut. Printing and editing problems have delayed Volumes III (Water Pollution) and VI (Legal Issues) and they will be forwarded as soon as they are completed. Fortunately each volume is a complete unit in itself.

The new approach, through the use of administratively imposed civil penalties, uses economic incentives that can be adjusted to meet different levels of resistance or cooperation. At most, the penalty to a violator would not exceed the cost of meeting his environmental requirements. It thus removes the economic advantage of deferring clean up activities without being unduly harsh.

Similar economic enforcement tools are either being considered or employed by Congress and several other states. While more experience is needed to prove their value, the possibility of increasing compliance with environmental laws at reduced cost and without the usual court delay deserves serious attention.

Very truly yours,

John A.S. McGlennon
Regional Administrator



The Judges (detail)
John Andrew and Son (after W. H. Drake)
American, 19th Century
Wood engraving
Courtesy Museum of Fine Arts, Boston, Ma.

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ECONOMIC LAW ENFORCEMENT

VOLUME IV

STRENGTHENING ENVIRONMENTAL LAW ENFORCEMENT: ILLEGAL FILLING

Final Report Submitted Under Contract #M00103910

by: The Connecticut Enforcement Project
Department of Environmental Protection
Hartford, Connecticut 06115

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PART I

USING ECONOMIC CIVIL ASSESSMENTS

PART I

USING ECONOMIC CIVIL ASSESSMENTS

Coastal and tidal areas and navigable waters have long been recognized as uniquely valuable resources. From the Roman beginnings of Connecticut's common law, their ownership has been held by the sovereign in trust for common use. Private ownership does not apply here. In recent years, moreover, the critical environmental importance of much of this resource has come to be understood.

One of Connecticut's first "environmental" laws was a 1963 act that prohibited filling below mean high tide without prior approval by the state (§25-7d of the Connecticut General Statutes). The General Assembly recognized that filling is an environmentally drastic and usually permanently harmful act. It also recognized, however, that, if done carefully and in the right types of location, the economic benefits of filling can outweigh its disadvantages. Consequently, the legislature charged the Water Resources Commission with regulating coastal filling in the public interest case by case. Today's descendant of the Commission, the Water Resources Unit of the Department of Environmental Protection, has inherited this responsibility for protecting the State's coastal resources.

Those who wish to place fill in coastal areas are required first to obtain the Department's review and approval. They must apply for a permit, provide technical information necessary to the review, and do only what is approved in a State permit. If they are dissatisfied with the Department's conclusions, they can appeal its rulings first in an administrative hearing and then to the courts. This procedure both affords the Department the opportunity to consider the issues involved in each case and allows the public to make known its views on the proposed project.

The Department's efforts to protect the coast have been largely ineffective to date. Forty-nine percent of all coastal fills are illegal fills. People have not applied for permits. Often they have specifically filled rapidly so as to leave the State faced with a "fait accompli". The incentives to create new waterfront land are great. The Department has not had the tools to deal with such scofflaws who fill without permits or who refuse to comply with orders to remove or modify illegal fills. The Department has faced two alternatives:

(1) It could refer the case to the Attorney General for court prosecution, or

(2) It could attempt to nudge the regulatee into compliance with threats or compromises.

Neither of these alternatives has worked. Going to court is slow, expensive, and most uncertain; but the Assistant Attorneys General to whom these cases are referred are not much more likely to be able to persuade someone to remove an expensive and valuable fill voluntarily without firm court backing than is the Department staff. This backing has not been obtained. Although the Water Resources Unit's Encroachment Line program has referred approximately ten cases of illegal filling to the Attorney General seeking removal during the last two years, not one fill has been removed. With no credible threat of court action to support it, the Department's attempts at jawboning have naturally been unsuccessful.

The set of economic civil assessments authorized by the regulations the Water Resources Unit is now proposing would change this situation. They would allow the Unit to apply concrete, immediate incentives as large as any benefits of noncompliance to induce prompt compliance.

This Part provides a brief overview of the Water Resources/ Connecticut Enforcement Project (CEP) Program: why it focuses on commercial/institutional coastal filling, how the three regulations would work, what safeguards are provided, who is subject regulation, and what impact this new enforcement response will have on the Water Resources Unit's administrative costs.

COMMERCIAL AND INSTITUTIONAL FILL

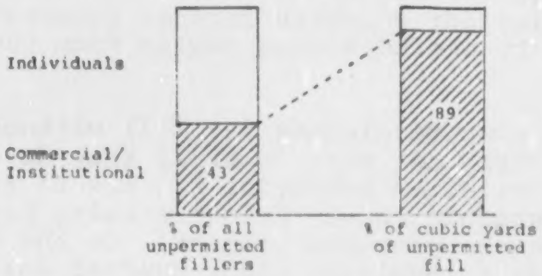
The Water Resources Unit is applying the Department's new economic enforcement tools narrowly at first. It will focus on (1) illegal filling in coastal, tidal, and navigable waters (not on inland or tidal wetlands) (2) by commercial/institutional fillers (not individuals). However, the economic enforcement tools developed for institutional filling along the coast can be applied to any illegal fill, in water or on land.

The Water Resources Unit is focusing first on illegal filling chiefly because, of the activities it regulates, filling has the most permanent and (usually) the most seriously harmful environmental impact. (Comparing current aerial photographs of the coast with those taken thirty years ago shows a surprising cumulative impact from the (usually illegal) filling that has taken place over the intervening years). Moreover, the Department's standards for deciding what to do with such cases are relatively clearly defined. (It is generally unfair to provide tight enforcement of unclear standards; to do so invites abuse of discretion and a consequent loss of public acceptance for both the substantive regulation and the enforcement system.)

The Water Resources Unit is initially bearing down on coastal filling for several reasons. The Unit is severely understaffed and could not afford to proceed other than in small steps. The statute establishing regulation in coastal areas has been through the courts and is legally well accepted (unlike, e.g. the new inland wetland laws). Finally, filling in coastal areas is likely to be especially harmful environmentally.

By further limiting the scope of its initial economic enforcement regulations to commercial/institutional fillers, the Water Resources Unit is focusing its limited resources on a small number of cases that cause most of the harm. Nine to fourteen illegal institutional fills account for 89 percent of the cubic yards of illegal fill placed along the Connecticut coast each year.

Institutions Account for Nine-Tenths of All Illegal Fill



Source: CEP Coastal Survey

The Department can realize significant environmental benefits by focusing its limited enforcement resources on this small but crucial group of violators.

TOOLS TO CONTROL ILLEGAL FILLING

The Department's interdependent civil assessment regulations for coastal fill will remove the very substantial economic incentives that now discourage compliance with the law. Section

411 will offset the savings a filler can obtain by ignoring the requirement that he submit a permit application containing technical data to the DEP before beginning any work. Section 412 would charge an illegal filler for all the benefits, including the beneficial return from the land, which he derived from the fill from the time of placement until the time of compliance, except that assessments shall not include benefits derived more than 2 years prior to detection. Section 413 would charge the illegal filler for the same economic benefits as would Section 412 during whatever period a regulatee failed to comply with an order to abate or modify an illegal fill or with the terms of a permit for a fill.

Failure to Apply
(Section 411)

Because filling has such drastic, permanent consequences, it is essential that the DEP be allowed to act before the first truckload of fill comes anywhere near the water's edge. When it becomes involved after the fill has been dumped, whatever action the Department takes (1) will not be able to prevent the substantial damage almost certainly already done and (2) will impose much larger hardship on the company responsible for the fill than similar requirements would before the fill was placed. Filling before applying for a permit further frustrates the Legislature's intent by excluding the public from the decision-making process.

One reason that some regulatees may fill without applying for a permit is the cost they must incur if they do apply. The Water Resources Unit requires potential fillers to submit engineering plans and a topographic survey before issuing permits, so that it may fully evaluate the proposed project. On the average, such plans and surveys cost a regulatee eight hundred dollars per case, eight hundred dollars he may prefer to invest in some other fashion.

Section 411 would remove this incentive not to apply. It would do so very simply -- by charging delinquents $885, the sum of the $800 a filler has saved by not applying for a permit and an additional $85, a conservative estimate of the interest the filler has saved on this $800 over a typical period of delay between placing an unpermitted fill and detection. This $885 figure will be adjusted from time to time to reflect the impact of inflation (or perhaps deflation) on the cost of applying for a permit.

Regulatees could avoid the $800 charge entirely, if, within 20 days after receipt of a Section 411 Notice of Violation, a company provides the Department the information it needs to decide what to do about an illegal fill (and to calculate a Section 412 or 413 civil assessment, should either prove necessary), it would have its 411 civil assessment lowered by $800 (See Section 411(g)(2). This is only fair because, in providing this information, a company will have made the very expenditures it had avoided earlier. The company would, however, still be assessed $85 to remove the benefit of having delayed this expenditure.

Filling Without A Permit (Section 412)

Section 412 would counterbalance the other benefits a company would obtain by filling without first obtaining a permit. First, and most important, it would charge the illegal filler an amount equal to the imputed economic return he has realized from the fill. This economic return would be assessed from either the time the fill was initially placed or for two years, whichever is the shorter period.

Section 412 would also charge those responsible for an illegal fill for the value of having delayed paying for removing it for however long the fill has been in place. (Since an unpermitted coastal fill is legally a nuisance, its owner has a duty to remove it as soon as it is placed.) If removing a fill would cost $15,000, a company earning 10 percent on its invested capital would save roughly $1,500 for each year it delayed removal. This assessment would remove this incentive to delay.

In order to make 412 assessments which accurately reflect the benefits non-complying regulatees have achieved, the Department will have to determine the regulatee's savings from delaying removal and his economic return from the land created by the fill case-by-case. It can do this easily and with a fair degree of precision with its present staff. When a Water Resources Field Inspector detects an illegal fill, he will pace off its dimensions and determine its composition. The Department's Land Acquisition Unit will make or arrange for an appraisal of the market value of the new illegal land created by the fill. Once this information on the fill's dimensions, composition and market value is available, the field inspector, using a simple economic formula, can calculate a regulatee's civil assessment liability in minutes.

Failure to Comply With An Order (Section 413)

Regulatees who ignore orders or the limiting conditions of a permit must be brought into compliance. Their disregard undercuts voluntary compliance by others, mocks the regulatory process, and is directly harmful to the public interest in the environment. Section 413 of the proposed regulations is designed to make sure Department orders (including Cease and Desist orders) and permit conditions are not ignored.

The economic bases for the assessments authorized in this regulation are almost identical to those of Section 412: those responsible for illegal fill will be charged for (1) the economic return attributable to the land created by the unpermitted fill during any period of delay in complying with the order or permit, and (2) the value of delaying whatever expenditures were called for in the order or permit during the same period.

SAFEGUARDS

These proposed regulations contain extensive safeguards designed to protect the citizen from possible misuse of Departmental discretion.

General Safeguards

All three regulations are subject to the following basic protections:

* Assessments are all determined according to carefully defined, measurable and therefore easily reviewable and correctible economic criteria.

* The Commissioner always must consider various grounds for mitigating an assessment. Subject to a duty to explain decisions to mitigate, he may always lower a civil assessment; he has, however, no power to raise it above the level determined by objective economic criteria.

* The Department carries the burden of proof, and it must always follow the procedures defined in the Connecticut Administrative Procedure Act and in its own Rules of Practice.

* All Department decisions are subject to judicial review.

Particular Protections

In addition to these across-the-board safeguards, these regulations contain important additional protections.

The most important of these protections is the right guaranteed in both Section 412 and 413 to the reduction (and refund with interest) of civil assessments that can be shown to have been based on overestimates of the benefits of noncompliance. (Such a guaranteed correction is not needed in Section 411 because its relatively small flat rate assessment is based on the average cost of applying for a permit in all cases; it is not fitted to the economics of individual cases.)

This correction procedure is quite simple. Once a company has come into compliance, it can present (1) vouchers and receipts documenting whatever costs it has incurred and (2) alternative appraisals of the value of the fill. If the Commissioner believes this evidence (and, once the company has complied with his order, he will have little motive to be unreasonably suspicious), he can order the appropriate reduction and refund. If the company is dissatisfied with his ruling, it has a right to a reviewable hearing.

This correction procedure protects the citizen against the risk that the Department might, by accident or design, assess any organization more than the economic benefit it had gained by not complying with the law. It ensures that the Department's civil assessments are set by objective economic criteria, not by anyone's subjective judgment.

There are other particular protections as well:

* As explained earlier, a company can avoid 90 percent of the Section 411 assessment merely by providing required information promptly.

* Liability under Section 412 is limited by

  -- a grandfather clause that bars assessments running prior to the effective date of these regulations.

  -- a maximum of two years of pre-detection liability to assessment.

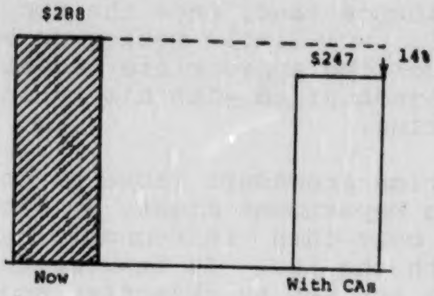
  -- the fact that the Department cannot impose Section 412 liability after the effective date of an order or permit for the fill.

* If a company falls behind in its order schedule, it can always reduce or eliminate its Section 413 liability by catching up.

THE COST SAVINGS OF IMPROVED ENFORCEMENT

Improving the Department's coastal enforcement by adapting its procedures to include the levying of civil assessments will yield economic as well as environmental benefits. The average administrative cost to the Department of processing its current coastal filling caseload will be cut by 14 percent by the addition of civil assessments to its enforcement arsenal.

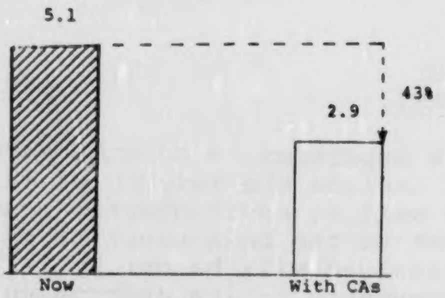
Administrative Costs Per Case



Source: Interviews with Unit personnel, time logs, and simulations

Civil assessments should also lead to a significant savings in average case processing time. For the same reasons that dollar costs will decrease, the average amount of time that a fill case remains pending before the Water Resources Unit should drop from 5.1 to somewhat less than 3 months, a more than 40 percent improvement.

Processing Time Per Case



Source: Water Resources Permit and Violation Files, interviews with Unit personnel

This time saving is highly significant because restoration of original bottom conditions becomes much more difficult if not impossible after fill has been left in place for more than two or three months.

More significantly, a CEP study of the effect of improved enforcement in other settings suggests that the number of violators that must be processed will drop substantially. The average decline in violations in this study was 72 percent. If this decline occurred in the coastal filling area, there would be a net decline in the cost of handling the current load of such cases of 76 percent. Since the scofflaw rate among those who fill is so unusually high, a 72 percent cut seems like a reasonable expectation once an effective enforcement approach is in place.

This cost savings is chiefly the result of two factors:

* When regulatees realize that any benefits they have gained from continued non-compliance will be denied them, they will be far less likely to engage in the dilatory tactics that are now so expensive to the Department;

* The Department's ability to mitigate all or part of a regulatee's Section 411 and 412 assessments gives it significant leverage in seeking to get regulatees to agree to orders without forcing the Department through costly negotiations, hearings, and appeals.

CONCLUSION

These regulations should allow the DEP to protect the state's coastal, tidal, and navigable waters effectively, economically, and equitably. (They could also later easily be extended to cover filling in inland and tidal wetlands and/or filling anywhere by individuals as well as institutions.)

When faced with an enforcement problem in these areas now, the Department must choose between jawboning and going to court. Without a convincing and prompt follow-through, the former is often ineffective. And going to court is too complex, severe, slow, and uncertain a response to be a satisfactory alternative.

Economic civil assessments provide a workable intermediate response. They provide just the right level of incentive, and they do so promptly. They are demonstrably fair: they assess violators only what they have gained from noncompliance. (In the process they protect law-abiding companies against unfair competition by scofflaw competitors.) The regulations' safeguards ensure that those subject to regulation will be treated fairly, and that they can always obtain review if they feel aggrieved. The economic basis of the regulations ensures an adequate but not excessive incentive, protects against possible abuse of administrative discretion, and provides an objective stand for review and correction.

PART II

SURVEY OF COASTAL FILL AND STRUCTURES VIOLATIONS

SURVEY OF COASTAL FILL AND STRUCTURES VIOLATIONS

I. INTRODUCTION

During the summer of 1974, the Comprehensive Enforcement Project (CEP) conducted a study to determine the level and nature of non-compliance with Connecticut's environmental laws by those responsible for structures (e.g. docks, breakwaters) and fills along the Connecticut coastline. The Connecticut General Statutes entrust the regulation of coastal structures and fills to the Department of Environmental Protection; authorize the Commissioner to determine the exact location of the mean high water mark that forms the boundary of the Department's jurisdiction; require those who would build structures or place fill in the state's tidal, coastal or navigable waters to obtain a permit to do so; and declare unpermitted structures or fill to be public nuisances.* The purposes of the study were to determine the exact nature of the enforcement problems confronting the State along the coast in order to (1) define what problems required priority attention and (2) help guide the Department and the Connecticut Enforcement Project in developing new enforcement tools specifically suited to these problems.

The survey results indicate that improved regulation of coastal filling by commercial and institutional regulatees could result in substantial environmental benefits without imposing burdensome costs on either the Department's seriously understaffed Water Resources Unit, which administers the permit program for structures and fill, or on the public. Illegal commercial/institutional fills are, on the average, over ten times as large as those placed by individuals. While fewer commercial fills lack permits than individuals fills, they account for 89% of the total volume of illegal fill. Commercial filling thus offers an excellent enforcement target, since a small number of violators cause the bulk of the environmental damage. Moreover, the nature of this damage from filling is much more severe and permanent than the harm done by the other regulated activities. It is primarily for this reason that the first set of civil assessment regulations developed for the Water Resources program focuses on unpermitted commercial and institutional fill.

The facts contained in this Part, and the analysis which accompanies them, explain in more detail the reasons for choosing commercial fill for the first Water Resources civil assessment regulations. A description of methodology used in the study is appended, as is a summary of the raw data from the survey.

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* Section 25-7 (b-e) of the Connecticut General Statutes.

II. COASTAL STRUCTURES*

71% of the state's coastal structures are illegal. While the rate of violation of both homeowners and institutional regulatees is substantial, the problem is most acute among the former. Over 80% of the individual homeowner structures surveyed are in violation. On a statewide basis, these amount to almost 5000 individual structures violations, and comprise 72% of the total illegal structures. Furthermore, the bulk of the environmental damage done by structures violations, as measured by structure size is not concentrated among one group of regulatees, but is instead distributed in almost the same proportions as the number of violations: the 72% of illegal structures placed by private home owners account for 68% of the total square footage of illegal structures in the survey. With its limited staff and resources, there is simply no way for the Water Resources Unit to do more than chip away at this problem.

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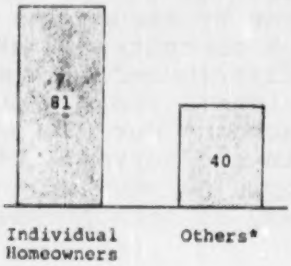
* Not including fills.

COASTAL STRUCTURES ARE A SUBSTANTIAL ENFORCEMENT PROBLEM ...

Percent of All Structures in Violation



Source: CEP Coastal Survey.

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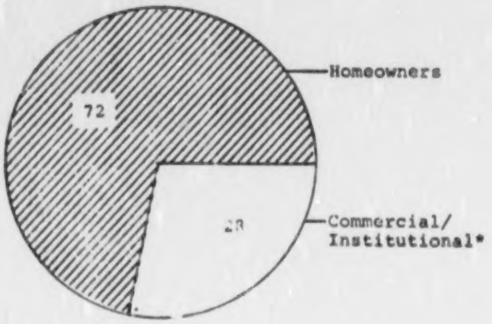
* Including Commercial and Institutional, Governmental, and Homeowners' Association.

II - Coastal Structures

INDIVIDUAL HOMEOWNERS ACCOUNT FOR 72 PERCENT OF ALL VIOLATION ...

Percent of All Structures in Violation



Source: CEP Coastal Survey.

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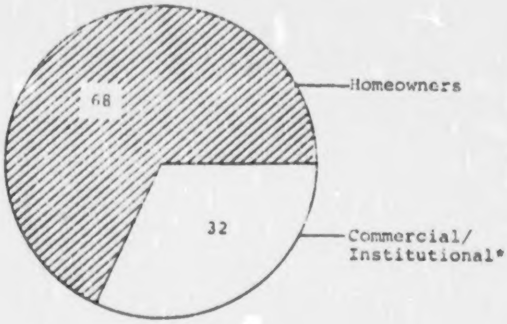
* Including Homeowners' Associations.

... AND ALMOST 70 PERCENT OF THE TOTAL NUMBER OF SQUARE FEET OF ILLEGAL STRUCTURES.

Percent of Total Area of Structures in Violation



Source: CEP Coastal Survey.

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* Including Homeowners' Associations.

III. COASTAL FILL

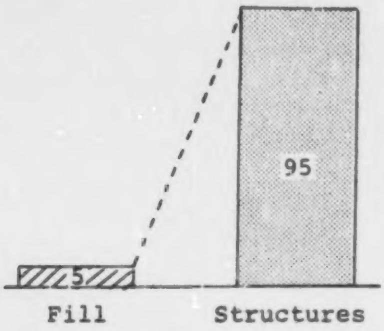
39% of the state's coastal fills do not have permits. Individual homeowners are responsible for 57% of all illegal fills, the remaining 43% having been placed by institutions. However, commercial and institutional fill make up 89% of the volume of illegal coastal fill. Furthermore, this 89% of all illegal fill is placed by only a small percentage of commercial and institutional fillers: 78% of all commercial/institutional fills have permits. Thus, by focusing enforcement effort on the scofflaw minority among institutional fillers, nine-tenths of the environmental damage of filling could be checked.

Moreover; the 9-14 new unpermitted commercial/institutional fills that are now placed each year represent a manageable caseload.

III - Coastal Fill

FILL VIOLATIONS ARE COMPARATIVELY FEW IN NUMBER.

Percent of All Coastal Violations

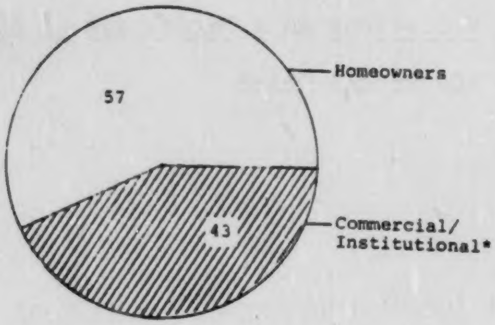


Source: CEP Coastal Survey.

III - Coastal Fill

COMMERCIAL/INSTITUTIONAL FILLS ACCOUNT FOR LESS THAN HALF OF ALL ILLEGAL FILLS ...

Percent of Total Number of Unpermitted Fills



Source: CEP Coastal Survey.

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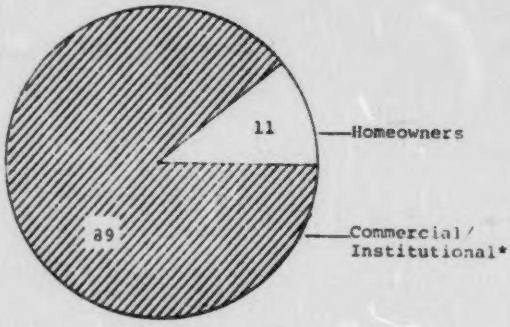
* Including Homeowners' Associations.

... BUT INSTITUTIONS ARE RESPONSIBLE FOR NINE-TENTHS OF THE VOLUME OF ALL ILLEGAL FILL.

Percent of Volume of Illegal Fill



Source: CEP Coastal Survey.

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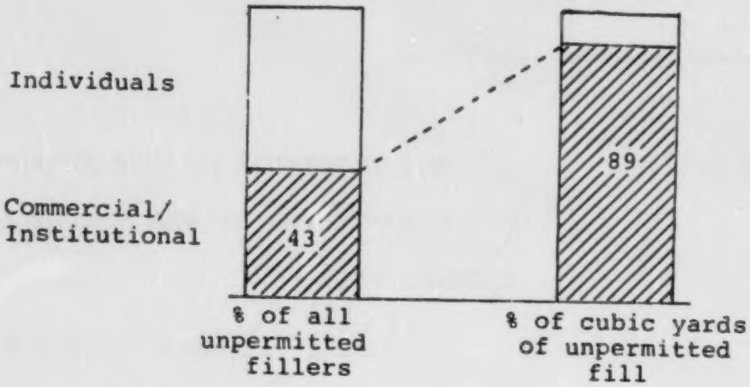
* Including Homeowners' Associations.

III - Coastal Fill

THUS, MOST OF THE ENVIRONMENTAL DAMAGE IS DONE BY A MINORITY OF VIOLATORS.

Commercial/Institutional Violations as a Percentage of All Fillers and of All Fills

Institutions Account for Nine-Tenths of All Illegal Fill



Source: CEP Coastal Survey

IV. CONCLUSIONS

The results of the Coastal Survey summarized above contributed importantly to the decision to focus the Comprehensive Enforcement Project's efforts in the Water Resources Unit on the problem of commercial filling. There are 20 structures, violations for each illegal fill, and a minority of these fills account for 90% of the physical volume of illegal fill. Moreover, the much smaller number of illegal fills is almost certainly responsible for more environmental damage than all the structures' users.

Other reasons also contributed to the decision:

* The understaffed Water Resources Unit could manage the 9-14 new cases of illegal commercial fill that occur annually. (With effective enforcement of the law in this area for the first time, moreover, the number of such cases can be expected to drop substantially.) It could not possibly handle the thousands of structures violations,

* The Department has relatively clear standards for granting or denying applications for fill permits,

* Tools developed for coastal filling could, if they proved successful, later be carried over to illegal filling in tidal and inland wetlands.

APPENDIX: COASTAL SURVEY METHODOLOGY

The data presented above is based on a sample of riverfront, oceanfront, and harbor conditions. The sample consists of all coastal structures and fills in Milford Township and Groton during the summer of 1974. All structures and fills in the sample area which had existed since 1939 were identified and presumed to be legal, since the state first began regulating coastal encroachment in that year. These structures and fills were then marked off on aerial maps of the coast made in 1968. Then, all permits granted subsequent to 1939 were entered onto the 1968 maps. Thus, when the CEP study team spent several days inspecting the coast on foot and by boat, they could easily identify fills and structures without permits, since all those with permits had been previously marked off on the maps. All the Milford structures and fills were then measured to provide an index of their environmental impact. The persons responsible for all structures and fills were identified for both towns so that classification and analysis could take place.

The combination of the Milford and Groton data provides a sample of sufficient size to provide a fair estimate of coastal conditions statewide. The numbers presented in the text describing the total State caseload (e.g., "5000 structures violations" and "a dozen commercial fills per year") were arrived at by a process of extrapolation. It was assumed that the relationship existing between number of permits and number of violations in Milford and Groton would exist throughout the state. Thus, after determining the number of permitted structures and fills statewide, it was possible to estimate how many other encroachments had been placed without permits.

All numbers and percentages that were not whole numbers were rounded to the lower number if the number in the third decimal place was 4 or less, to the higher number if it were 6 or more. If the third decimal place was occupied by a 5, rounding was always to the nearest even number.

APPENDIX: COASTAL SURVEY DATA

MILFORD

Structures	220
Fills	14
Structures Violations	166
Fill Violations	9
Homeowner Structures	150
Homeowner Structures Violations	121
Homeowner Fills	5
Homeowner Fill Violations	5
Total Sq. Footage/Structures	221,246
Total Sq. Footage/Structures in Violation	138,188
Total Sq. Footage/Structures of Homeowners	117,441
Total Sq. Footage/Structures of Homeowners in Violation	79,576
Total Cu. Footage/Fills	963,850
Total Cu. Footage/Fills in Violation	386,350
Total Cu. Footage/Fills of Homeowners	43,350
Total Cu. Footage/Fills of Homeowners in Violation	43,350

GROTON

Structures	302
Fills	54
Structures Violations	205
Fill Violations	21
Homeowner Structures	182
Homeowner Structures Violations	148
Homeowner Fills	14
Homeowner Fill Violations	12

PART III

CALCULATING ECONOMIC REMEDIES

CHAPTER I

CALCULATING ECONOMIC ASSESSMENTS

The Department of Environmental Protection's civil assessments for unpermitted coastal fill seek to eliminate the economic benefits of illegally filling. Such benefits include:

* The value of the land created by the illegal fill;

* Delaying the cost of removing the illegal fill;

* Avoiding the Water Resources Unit's permit process.

The two key illegal fill regulations, Section 22a-6b-412 and 413, are designed to counterbalance the first two of these benefits. Both will vary widely from case to case. The benefit a regulatee can realize from the land it has created will vary according to the land's size, location, composition, surroundings and zoning. Similarly, the savings a regulatee gains from delaying the removal of an illegal fill depends upon a variety of factors, including the total cost of removal and the price it must pay to borrow money. Both benefits increase the longer the unpermitted fill remains. Section 412 and 413 assessments, then, must be carefully fitted to each situation.

Section 22a-6b-411 allows the Department to levy a monetary assessment equal to the amount a regulatee typically saves if it has not prepared and submitted a permit application before filling. This assessment, the average of what the required permit application cost a sample of regulatees, is a flat charge that does not vary from case to case.

A regulatee who is delinquent in removing an unpermitted fill does not escape the expense of removing that fill. It merely has postponed an expenditure that it had been obligated to make some time in the past. (This interval will be called the assessment period.) It is required to remove the fill now or be liable for further assessment. Although it has saved the amount that the necessary filling operation would have cost in the past, plus accumulated interest, it still faces an expense today. Its net saving is the difference between the two amounts.

If these civil assessments are to be effective, they must fully counterbalance the benefits of noncompliance. Section 411's assessment does this very simply. However, the assessments authorized by Sections 412 and 413 have to be closely tailored to the economics of each situation if they are to be effective and equitable. This Chapter explains the procedure that the Connecticut Enforcement Project (CEP) has developed to help the Department calculate accurate assessments appropriate to each illegal fill case easily and quickly. Subsequent Chapters are devoted to explaining how the several variables used in the formula are determined.

THE ASSESSMENT FORMULA

Department staff are not required to make a series of calculations in order to determine an accurate assessment. They can use the following formula, either manually or with a desk calculator.

Notation

Input Variables

AP = Assessment period, i.e., the period of delay, in years.

CC = Annual cost of capital or discount rate, as a decimal fraction.

CR = Today's cost of removal or modification, in dollars.

BR = Annual beneficial return to the regulatee on the land created, in dollars.

MV = Total current market value of the land created, if the fill could be left in place.

RI = Annual rate of inflation, as a decimal fraction.

T = Effective U. S. income tax rate, as a decimal fraction.

Output Variables

CA = Civil assessment per month, in dollars.

Other Variables

CVBR = Compound value of BR over the assessment period, in dollars.

CVCR = Compound value of the costs of removal that should have been incurred at the beginning of the Assessment Period, in dollars.

Formula

The civil assessment is given by formula (1) below, with the additional variables defined by equations (2), (3), and (4). (These formulae are derived in the following section.)

$$CA = 1/12(AP)\left[\,(CVCR - CR) + CVBR\,\right] \qquad (1)$$

$$CVCR = (1 - T)\ CR\ \left(\frac{1 + CC}{1 + RI}\right)^{AP} \qquad (2)$$

$$BR = (MV)\ (CC) \qquad (3)$$

$$CVBR = (1 - T)\ BR\ \left(\frac{1 + RI}{CC - RI}\right)\left[\left(\frac{1 + CC}{1 + RI}\right)^{AP} - 1\right] \qquad (4)$$

Derivations

CA:

The monthly CA is equal to the sum of the compounded monthly savings from having delayed required removal costs plus the compounded monthly benefits derivable from the land created by the fill. These average monthly benefits are calculated by finding the regulatee's total benefits during the entire assessment period (CVCR-CR and CVMR) and dividing each by the number of months in the assessment period. The regulatee's net saving on removal is the difference between the compounded value of past removal cost and the cost of removal today. Thus, CVCR-CR represents the regulatee's benefit from delayed removal. CVBR represents the regulatee's benefit derivable from the land plus interest on that amount over the assessment period. Thus,

$$CA = 1/12(AP)(CVCR-CR) \quad + \quad 1/12(AP) \quad (CVBR)$$

Formula (1) above is an equivalent formula in which 1/12(AP) is distributed over the sum of CVCR and CVBR.

CVCR:

Today's cost of removal is CR before payment of income tax. Since removal costs are generally considered to be an expense of doing business for Federal tax purposes, the regulatee may deduct this expense from his gross income before computing his tax liability. Each dollar of removal costs lowers the regulatee's net income by T percent, where T is the effective U. S. income tax rate. Thus, if T is .48 (i.e. 48 percent, the current corporate tax rate), then a before-tax removal cost of $1 is only 52 cents after-tax.

To find the current compound value, after tax, of the cost of removal that should have been incurred at the beginning of the assessment period, we first deflate (1-T) (CR) by the rate of inflation during the assessment period, and then bring the resulting amount to present value by multiplying by the cost of capital. Thus:

$$CVCR = CR\ (1-T)\ \left(\frac{1}{1 + RI}\right)^{AP}\ (1+CC)^{AP}$$

Formula (2) above is equivalent.

BR:

The Beneficial Return on the fill is simply the gross return on an investment equivalent to the market value of the land. Since the investment is generally in undeveloped land, depreciation need not be considered for tax purposes. Appreciation or depreciation in value at the time of possible resale is handled through an inflation factor in CVBR. Thus:

$$BR = (MV)\ (CC)$$

which is the same as the equation (3).

CVBR:

Today's annual gross value to the regulatee of the land created is BR. This amount which the regulatee receives in rent, use value, or speculative holding of the land increases his gross income and thus his income tax liability now or in the future. After paying tax at an effective rate of T, an additional income of BR increases his after tax income by (1-T) BR. The compound value, after tax, of the annual value of the land is found by compounding and summing the values of the after tax income for each of the years in the assessment period. The land's after tax value in each year is the current value, (1-T)(BR), deflated by an inflation factor and multiplied by a compounding factor for the cost of capital. Thus:

$$\text{CVBR} = \sum_{n=1}^{AP} (1-T)\ (BR) \left(\frac{1+CC}{1+RI}\right)^{n-1}$$

Where n is an index referencing a year in the assessment period (working back from the present). Formula (4) above is equivalent, based on the formula for the sum of a geometric series.

DETERMINING MAXIMUM ASSESSMENTS

For purposes of calculating maximum civil assessments (which appear in the regulation assessment schedules), we assume the following values:

* RI = .15 (i.e., 15%). The typical rate of inflation has increased markedly over the last several decades and construction and property rental costs have experienced above average inflation.

* AP = 2 years. This is the maximum duration of pre-detection benefit that the civil assessments in the 412 regulation account for, and this is a reasonable estimate of the possible duration of post-detection delay.

* CC = .20(i.e., 20%). Over the long run, the cost of capital has usually exceeded the inflation rate by about 5 percent to provide an adequate return and to compensate investors for inflation.

* T = 0. Municipalities and non-profit institutions have a zero income tax rate.

An Example: Derivation of a Maximum Assessment

The following computations illustrate the calculation of the civil assessment from Schedule A in Sections 22a-6b-412 and 413 which appears in the cell formed by the intersection of the Market Value row "$500-10,000" and the Removal Cost column "$5001-10,000". Other input variables are set at the values specified above.

$$\text{CVCR} = (1-.00)\ 10{,}000 \left(\frac{1+.20}{1+.15}\right)^{2} = 10888.47 \quad [\text{by } (2)\ ]$$

$BR = (50,000)\ (.20) = 10,000$ [by (3)]

$CVBR = (1=.00)\ 10,000\ \frac{1+.15}{.20-.15}\left[\left(\frac{1+.20}{1+.15}\right)^{2} -1\right] = 20434.78$ [by (4)]

$CA = 1/12(2)\ \ [(10,888.47 - 10,000.00) + 20434.78]$

$= 3553.88$ [by (1)]

For this example the civil assessment would be $3553.88 for each month in which the regulatee failed to comply with the statutory permit requirement or with a Department order.

SETTING INDIVIDUAL ASSESSMENTS

Individual assessments are determined using the same assessment formulae as were used to fix the maximum assessment schedule. However, the Department will use current real values for AP, CC, CR, BR, RI and T.

* The Assessment Period (AP) will, (1) for Section 412, be the actual period of past delay for which the regulatee is liable, and (2) for Section 413, be for however long the regulatee is not in compliance with the terms of an order. The AP should be rounded to the nearest month, and the resulting period converted into years with a decimal fraction if necessary. For example, 1 year and 3 months becomes 1.25 years.

* The Cost of Capital (CC) will be set in most cases as the marginal rate obtaining at the time for persons similar to the regulatee (e.g., for companies in the same industry). (See Chapter 3.)

* The Cost of Removal (CR) will be determined on a case-by-case basis by Water Resources Unit personnel applying excavation industry data to the particular circumstances, or else by outside consultants. (See Chapter 2.)

* Benefit Derivable from the Land Created by the Fill (BR) will be determined on a case-by-case basis by Land Acquisition Unit appraisers or by outside consultants. (See Chapter 3.)

* The Rate of Inflation (Deflation) (RI) will be defined as a rolling three year average of the annual rate of price change based on the best available index. (See Chapter 3.)

- The U. S. Income Tax Rate (T) applicable to the regulatee will be assumed to be 48 percent if the regulatee is a corporation (with very limited exceptions) and zero percent if it is a non-profit institution. The rate will vary if the source is an individual or a partnership. (See Chapter 3.)

The following chapters discuss how the Water Resources Unit will determine a regulatee's cost of compliance and how the Unit will treat inflation, cost of capital and taxes in calculating assessments.

CHAPTER II

DETERMINING THE COST OF COMPLIANCE

The purpose of the Department's civil assessments is to discourage noncompliance by taking away the regulatee's economic benefit from remaining in violation. The Department must, therefore, determine the gain its regulatees derive from noncompliance. A person who has filled illegally reaps two primary financial benefits from his action.

First, regulatees ordered to remove a fill may realize substantial savings by delaying the costs of removal. Consider the case of a violator who delays for one year in removing a fill he has placed illegally and must remove. By delaying removal he can realize one year's return on the cost of removal by investing the sum in an alternative and profitable investment.

Example: Assume that the cost to the regulatee of removing its fill was $30,000, and that its cost of capital (the return typically earned by the regulatee on funds available to it) is 12 percent. Thus, its benefit from delaying removal for 1 year, assuming no inflation during that year, is 12 percent of $30,000 or $3,600.

Second, regulatees benefit from the land they create when they fill. The amount of this benefit will vary depending on a variety of factors, including the size of the land created, its location, the zoning restrictions that apply to it, the value of adjoining and proximate lands, etc. This Land Value benefit is always a factor in the regulatee's mind: had it not believed it would benefit from placing the fill, it would not have incurred the considerable expense of filling. The regulatee's desire to continue reaping economic benefits from this land will also encourage it to delay removal for as long as possible.

Regulatees who are ordered to remove their unpermitted fills face substantial costs in doing so. Not only must the regulatee spend a large sum of money to effect the excavation, hauling and disposal of the fill material, but it loses the benefit of the land it had created as well. This economic loss (referred to as the regulatee's Cost of Compliance) is equal to the regulatee's Cost of Removal (what it must spend to satisfy the Department's demands) plus its Land Value Benefit (which it will lose when the land is removed).

The regulatee's Cost of Compliance is a necessary piece of information for the Department's assessment calculus. Determining the cost of removing fill for an individual regulatee requires a clear understanding of the mechanics of fill removal and a knowledge of the variables which affect the cost of removal. Determining the benefit a regulatee derives from the land created by the illegal fill will usually require the services of experienced land appraisers, either consultants or members of the Land Acquisition staff. This Chapter explains (1) how the Cost of Removal can be calculated quickly and easily, and (2) how the Unit can obtain accurate and inexpensive appraisals of a regulatee's Land Value Benefit.

COST OF REMOVAL

To determine the benefits of delaying removal (or modification) of an illegal fill, the Department must know how much the regulatee should have spent to comply. To determine what its cost of removal is, one must first decide what each of the following component costs are:

EC = Excavation Cost = The total cost to the regulatee of excavating fill material (in dollars)

TC = Transport Cost = The total cost to the regulatee of transporting its fill material from the fill site to a dump site (in dollars)

DC = Disposal Cost - The total cost to the regulatee of disposing of excavated fill (in dollars)

FC = Fixed Charges = The total cost to the regulatee of mobilization and demobilization of excavation and grading equipment (in dollars)

P&OM = Profit and Overhead Margin = The percentage by which contractors customarily inflate the sum of EC, TC, DC, and FC in calculating their bill to their customers (in percent)

This section first outlines how the Department should determine what each of these costs is and then goes on to show how these bits of information are used to calculate individual assessments.

EXCAVATING FILL

The first step in removing fill is to excavate it with some type of earth-moving equipment such as a backhoe, dragline, or bulldozer-loader.

The cost of excavating fill depends upon the following variables:

V = Volume = The volume of the fill to be removed (in cubic yards)

ERR = Equipment Rental Rate = The rental rate of the excavating equipment and labor to be employed (in dollars per day)

EER = Equipment Efficiency Rate = The average rate of speed at which the excavating equipment will operate (in cubic yards per day)

Dividing the Equipment Rental Rate by the Equipment Efficiency Rate will yield the cost per cubic yard of excavation. Multiplying this by the total Volume yields the total cost of excavation.

Thus, the formula for the excavation cost of any fill removal is:

$$EC = \frac{(V)\ (ERR)}{(EER)} \quad \text{(in dollars)}$$

Example: The Department orders the removal of 10,000 cubic yards of fill. The excavating equipment to be employed is a 3/4 yd. dragline, which rents for $360 per day, including labor, and will operate at a speed of 280 cubic yards per day.

V = 10,000

ERR = $360

EER = 280

$$EC = \frac{(10{,}000)\ (\$360)}{280} = \$12{,}857$$

The per cubic yard cost of excavation is

$$\frac{\$12{,}857}{10{,}000} = \$1.28$$

TRANSPORTING FILL

As the earth-moving equipment excavates the fill material, it loads the material onto trucks which will transport the material to some pre-determined dump site.

The cost of transporting fill depends upon the following variables:

V = Volume = The volume of the fill material excavated (in cubic yards).

EF = Expansion Factor = The percentage by which the material expands in volume after it is excavated, (in percent).

D = Distance = The distance from the fill site to the dump site (in miles).

TS = Truck Speed = The average speed of the trucks in transit from the fill site to the dump site and back (in miles per hour).

IT = Idle Time = The average amount of time per 8-hour working day which a truck remains idle, either waiting to be filled with excavated material or to discharge its load at the dump site (in hours).

C = Capacity = The capacity of the trucks employed for unexpanded material (in cubic yards).

TRR = Truck Rental Rate = The daily per truck rental of the trucks and drivers to be employed (in dollars per day).

From the above variables, the following factors can be derived:

TTV = True Transported Volume = The volume of the fill to be transported increased by the Expansion Factor.

$$TTV = (V)\ (1 + EF) \qquad \text{(in cubic yards)}$$

TT = Transport Time = The average amount of one eight-hour working day which a truck spends in transit between fill site and dump site.

$$TT = 8 - IT \qquad \text{(in hours)}$$

MPD = Miles Per Day = The average distance traveled by a truck between a fill site and dump site during an eight hour working day.

$$MPD = (TT)\ (TS) \qquad \text{(in miles)}$$

TPD = Trips Per Day = The average number of round trips one truck makes from fill site to dump site and back in one eight hour working day.

$$TPD = \frac{(MPD)}{(2D)} \qquad \text{(in trips)}$$

DVT = Daily Volume Transported = The average amount of fill material transported from the fill site to the dump site per working day by the trucks.

$$DVT = (TPD)\ (C) \qquad \text{(in cubic yards)}$$

TD = Transport Days = The number of truck days* required to complete the transporting of the excavated material from the fill site to a dump site

$$TD = \frac{TTV}{DVT}$$

Multiplying the Truck Rental Rate by the Transport Days yields the total cost of transport.

Thus, the formula for the transport cost of any fill removal is:

$$TC = (TD)\ (TRR)$$

which expands to:

$$TC = \left[\frac{[(V)\ (1 + EF)]}{\dfrac{(8 - IT)\ (TS)\ (C)}{(2D)}}\right][TRR]$$

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* A "truck day" is one day's work by one truck. Thus, TD equals the number of days it would take one truck of a given capacity to complete the transport of the entire fill. Almost all fill removal jobs will employ more than one truck, but it is the number of truck days, not the number of trucks employed per day which is significant in the cost estimation formula.

Derivation

$$TC = (TD)\ (TRR)$$

$$TC = \frac{TTV}{DVT}\ (TRR)$$

$$TC = \frac{(V)\ (1 + EF)}{DVT}\ (TRR)$$

$$TC = \frac{(V)\ (1 + EF)}{(TPD)\ (C)}\ (TRR)$$

$$TC = \left[\frac{[(V)\ (1 + EF)]}{\frac{(MPD)\ (C)}{(2D)}}\right]\ [TRR]$$

$$TC = \left[\frac{[(V)\ (1 + EF)]}{\frac{(TT)\ (TS)\ (C)}{(2D)}}\right]\ [TRR]$$

$$TC = \left[\frac{[(V)\ (1 + EF)]}{\frac{(8 - IT)\ (TS)\ (C)}{(2D)}}\right]\ [TRR]$$

Example: A fill with an in-place volume of 10,000 cubic yards which the Department has ordered removed expands by 15 percent when it is excavated and placed on three dump trucks with a capacity of 15 cubic yards each. These trucks, with drivers, rent for $190 per day, and will travel the 5 miles between the fill site and dump site at an average moving speed of 18 miles per hour. The trucks will spend two hours of an eight hour working day idle, during which time they are loading and unloading excavated material.

$V = 10{,}000$

$EF = .15$

$D = 5$

$TS = 18$

$IT = 2$

$C = 15$

$TRR = \$190$

Thus,

$$TTV = (10,000)\ (1.15) = 11,500 \text{ cu. yd.}$$

$$TT = 8 - 2 = 6 \text{ hrs.}$$

$$MPD = (6)\ (18) = 108 \text{ miles}$$

$$TPD = \frac{108}{2(5)} = 10.8 \qquad 11 \text{ trips}$$

$$DVT = (11)(15) = 165 \text{ cu. yds.}$$

$$TD = \frac{11,500}{165} = 69.6 \qquad 70 \text{ days}$$

Therefore,

$$TC = (70)\ (\$190) = \$13,300$$

The per cubic yard cost of fill transport is:

$$\frac{\$13,300}{10,000} = \$1.33$$

DISPOSING OF EXCAVATED FILL

Before the removal of fill gets underway, there must be a plan for disposal of the excavated material. This decision will determine the dump site, and in part determines the costs incurred in fill removal, since the distance between fill site and dump site is a key factor in the Transport Cost equation. There are several options. The material may be sold, either to the contractor who performs the removal operation or to some other person, in which case the responsibility for its proper disposal naturally passes to the new owner. If the person removing his fill can find no one who will buy or take his excavated material without charge, he will incur the additional expense of having to employ more equipment at the dump site to spread out and smooth over the excavated material. In rare instances, the person may have to pay either an individual or a municipal solid waste disposal site for the privilege of dumping his unwanted material.

Before the removal operation is performed, the Department's Field Inspectors will have no way of knowing what is to become of the excavated material. However, some assumptions about the method and cost of disposal must be made in order to arrive at a civil assessment amount. It will be assumed that the regulatee will be unable to sell the material and that he will be required to grade the material at the dump site, but that he will not have to pay a disposal fee. Making these assumptions will produce high but reasonable estimates of removal costs. Since all civil assessments will be reduced upon presentation of evidence that the Department's estimate was too high once the regulatee has come into compliance, such an estimate is acceptable.

Under these assumptions, the cost of disposing of excavated fill depends upon the following variables:

TTV = True Transport Volume = The Volume of the excavated fill Increased by the Expansion Factor (in cubic yards).

GRR = Grading Rental Rate = The daily per machine rental cost for the equipment and operators to be employed (in dollars per day).

GER = Grading Efficiency Rate = The average rate of speed at which the grading equipment will operate (in cubic yards per day).

Dividing the Grading Rental Rate by the Grading Efficiency Rate will yield the cost per cubic yard of excavation. Multiplying this by the True Transported Volume yields the total cost of disposal.

Thus, the formula for the disposal cost of any fill removal is:

$$DC = \frac{(TTV)\ (GRR)}{(GER)} \quad \text{(in dollars)}$$

Example: A fill with a True Transported Volume of 11,500 cubic yards has been removed in accordance with the Department's order. The regulatee's arrangements for disposing of the material entail giving it to a third party free of charge and grading the material at the third party's dump site. This will be done by a bulldozer which rents for \$370 per day, including labor, and which grades at a speed of 1000 cubic yards per day.

TTV = 11,500

GRR = \$370

GER = 1000

$$DC = \frac{(11{,}500)\ (\$370)}{1{,}000} = \$4{,}255$$

The per cubic yard cost of grading is

$$\frac{\$4,255}{10,000^*} = \$.4255 \quad \text{or} \quad \$.43$$

ESTIMATING FIXED CHARGES

Fixed charges are the one-time costs for mobilizing and demobilizing equipment. Every type and size of excavation equipment has its own Fixed Charge. These fixed charges are listed in

FC = Fixed Charges = The cost of mobilizing and demobilizing excavating and grading equipment (in dollars).

Example: The Department orders a regulatee to remove his fill. Excavation will require the use of a 1-1/2 cubic yard backhoe, the mobilization and demobilization of which costs $175. Disposal will include grading the excavated material at the dump site by a 1-1/2 cubic yard bulldozer, whose mobilization and demobilization cost $50.

FC = $175 + $50 = $225

Fixed charges are not a function of the volume of material to be removed.

ADDING THE PROFIT AND OVERHEAD CHARGE

The excavation, transport, disposal and fixed charges discussed above do not include any allowance for contractor profit and overhead. Contractors customarily inflate their charge for the four factors listed above by between 12 and 20 percent to account for overhead expenses (billing, records, telephone, office rent, etc.) and profit.

P&OM = Profit and Overhead Margin = The percentage by which contractors customarily inflate the sum of EC, TC, DC and FC in calculating their bill to their customers (in percent).

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* This 10,000 figure is the in-place volume of the fill in the example. Multiplying this by the 15 percent yields the True Transported Volume, 11,500 cubic yards, which is also the amount which must be graded.

Example: A contractor performs a fill removal for a customer. The total amount of the excavation, transport, disposal and fixed charges of this operation are \$27,110. This contractor customarily inflates his removal charges by 10 percent.

$$EC + TC + DC + FC = \$27,110$$

The contractor will thus bill his customer for somewhere in the vicinity of \$30,000, since

$$(1.10)\ (\$27,110) = \$29,821 \quad \text{or} \quad \$30,000$$

SUMMARY:
COST OF REMOVAL

Adding the Excavation Cost, the Transport Cost, the Disposal Cost and the Fixed Charges, and increasing the resulting sum by the Profit and Overhead Margin, yields the regulatee's Cost of Removal.

$$CR = (1 + P\&OM)\ (EC + TC + DC + FC) \quad \text{(in dollars)}$$

Example: A regulatee who was ordered to remove his fill by the Department incurs the following costs:

$EC = \$12,857$

$TC = \$13,300$

$DC = \$\ 4,255$

$FC = \$\ 225$

The contractor who performs the removal operation charges on the basis of a 10 percent Profit and Overhead Margin. The regulatee's total cost of removal is thus

$$(1.10) \quad (\$12,857) + (\$13,300) + (\$4,255) + (\$225)$$

$$= (1.10)\ (\$30,637) = \$33,700$$

The per cubic yard cost of removal is $\frac{\$33,700}{10,000} = \$3.37$

ACTUAL ASSESSMENTS

The amount of most civil assessments for illegal filling will be determined before removal is effected. The Department will therefore have to make assumptions about some of the factors in the cost of removal equation in order to set the violator's initial liability.

The following assumptions will be made by the Department in calculating the civil assessments:

Excavation Costs and Disposal Costs

ERRs, EERs, GRRs, and GERs will be found in tables found in a current industry cost information publication, such as Building Cost Construction Data, published by the R. S. Means Company of Duxbury, Massachusetts.

Transport Costs

TRR = $195/day

C = 15 cu. yds.

TS = 18 mph

IT = 2 hrs. (or 25 percent of the working day)

D = 5 miles

Fixed Charges

Fixed charges for various excavating and grading machines are also available in industry publications such as Building Cost Construction Data.

Profit and Overhead Margin

P&OM = 10%

ADDITIONAL INFORMATION

For detailed information concerning how to go about finding an individual regulatee's Cost of Removal, see the chapter entitled "Finding the Regulatee's Cost of Compliance" in the Operating Manual for the Application of Civil Assessments.

LAND VALUE BENEFIT

Each month that a regulatee has an unpermitted fill in place, he reaps a benefit from the land created by the fill. This benefit represents the second, and in most cases much the larger element in a regulatee's Cost of Compliance. A regulatee's Land Value Benefit is considered part of his Cost of Compliance since he must, in effect, "pay" the amount of this benefit when he comes into compliance with an order to remove the fill.

Under the civil assessment system, when an illegal fill is detected, Water Resources Field Inspectors will examine the fill to obtain information necessary to determine the regulatee's Cost of Removal. They will also inform the Department's Land Acquisition Unit of the fill's existence, and this Unit will then make an appraisal of the Land Value Benefit, taking into account the land's size, location, composition, zoning, and likely appreciation. If Land Acquisition is unable to make an estimate, the Water Resources Unit should obtain an outside appraiser.

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A regulatee's Cost of Compliance is equal to the present value of the sum of its benefits from delaying removal of the fill and its benefits from the land created. It can be calculated accurately and relatively easily using the above formulae.

CHAPTER III

HANDLING OTHER VARIABLES

INFLATION

Inflation affects both the cost of fill removal and the value of the land created by a fill. The importance of inflation for estimating the cash flow of the costs of compliance over a period of years should be obvious after the experience of the last several years. Machinery and labor costs have increased continuously, and the cost of fuel for excavation equipment and hauling vehicles has skyrocketed. The value of land, especially waterfront land, has also increased sharply.

Indexing Inflation

The economic assessment formula adjusts the estimated costs of compliance cash flow for inflation. All the Department need do is adjust the figure used as the assumed inflation (deflation) rate each year to reflect the average experience of the previous three years. A three-year rolling average is used to flatten out sudden sharp shifts in the rate both to reduce sudden shifts in assessment levels and because people making capital decisions similarly "smooth" adjustments in their "inflation expectations."

The civil assessment regulations allow the Commissioner to correlate the inflation rate used in the assessment calculus with whatever index of price change he finds most appropriate.

The U. S. Bureau of Labor Statistics, although it compiles cost indexes for hundreds of commodities, does not prepare a fill removal cost index. An appropriate substitute can be found in the Consumer Price Index (CPI) which combines the indexes for commodities and services. The most convenient source for the CPI is the Monthly Labor Review, available in the Government Documents room of the State Library.

Calculating The Rate of Inflation

The Consumer Price Indexes (All Items) from 1971 to 1974 yield the rate of inflation (RI) for use in the formula throughout 1975. The figure is obtained by averaging the percent changes from 1971-72, 1972-73 and 1973-74.

ALL ITEMS

Year	Index	Percent Change	
1971	121.3		6.8%
1972	125.3	3.3	
1973	133.1	6.2	
1974	147.7	11.0	

6.8% = RI for 1975.

USING THE COST OF CAPITAL

One of the innovations of the Connecticut Enforcement Program is the attempt to put the regulatory agency into the shoes of the regulatee. Just as businessmen faced with environmental regulation focus immediately on the cost of raising and using money to meet environmental standards now and in the future, so must economic civil assessments take the current and continuing costs of using money into account.

Once the cost of compliance cash flow (which describes the cash outlays that will be required in each year of control programs) has been established, the economic assessment calculus discounts it at the cost of capital rate appropriate to the particular regulatee to a present value. If the cost of capital is 10 percent, expenditures of $1100 a year from now would be discounted to a present value of $1000 (i.e., 1100/ 1+ .10).

Such a discounting is necessary because ten dollars of expense three years from now is less painful than ten dollars due now. It is less painful because, over the three years one retains that ten dollars, one can use it. If, for example, one could earn one dollar in each of the three years one had to invest the ten dollars, the net reduction in one's current worth attributable to this future expense is $\$7.51\ [.10/(1+.10)^{3}]$.

Businessmen evaluating the costs of different investment projects, including abatement projects, have to take the time value of money into account. They are keenly aware that ten dollars spent three years in the future entails considerably less cost than ten dollars spent now. Similarly, ten dollars received (or saved in taxes) three years hence is less valuable than such a savings received immediately. They consider the total present value of a project as its immediate costs plus future costs, reduced by a discount factor equal to the time value of money.

USING THE COST OF CAPITAL

The cost of capital to a regulatee is its marginal cost per year of obtaining additional capital funds. For most businesses, the cost of capital is the weighted average of the costs of debt (e.g., bond issues or bank debt) and equity (e.g., sales of common stock). If a company's capital is 50 percent debt with a marginal cost of 10 percent and 50 percent equity with a current cost of 20 percent, the company's cost of capital will be 15 percent.

The CEP formula uses a marginal cost of capital rate so that the low interest costs on bonds sold twenty or thirty years ago do not depress the rate so as to make it a misleading measure of the current cost of money to the regulatee. The marginal cost of capital rate also effectively reflects changes in the market price of money of all sorts. When interest rates go up (and common stock prices down), the marginal cost of capital will go up, accurately reflecting the increased cost a regulatee will have to pay for the resources required for the control project.

The cost of capital is the right discount factor to use in the economic assessment calculus because (1) it is the cost business must pay for its money and (2) it therefore represents a minimum rate of return businessmen must obtain on their investments. A business will be able to earn at least this rate of return on any resources available to it, which makes it the proper discount rate for bringing future costs to present value.

The cost of capital is also a good measure of the opportunity costs of investing in the pollution control. Not only are the outlays required for such expenditures not recouped, but they clearly generate no income above expenses. In the meantime, the regulatee must pay its cost of capital rate to obtain the money needed to pay for the expenditures. The civil assessment formula discounts future costs by the cost of capital and includes opportunity costs by using the cost of capital as the interest rate in the amortization formula. The flat, monthly rate which is thereby derived represents not only the dollar cost of control but also an interest component which equals the minimum rate of return available on the investment. The resulting civil assessment thus offsets not only equipment and operating costs savings due to noncompliance, but also the return on capital which would be made by investment of these savings in a profitable venture.

COMPONENTS OF THE COST OF CAPITAL

Since the cost of capital is the cost of raising or borrowing money, it is natural that different people and businesses have different costs of capital.

Industry-Wide Costs of Capital

Although the cost of capital is a key tool used all the time by businessmen and economists, it is hard to pin down exactly, especially on a company-by-company basis, chiefly because of the difficulty of measuring the cost of the equity component. If equity is based on book value, distortions are possible for a variety of accounting reasons, e.g., because assets purchased long ago that have appreciated substantially may still be carried at their original worth. Using market value avoids this difficulty; in fact, the market adjusts equity values taking future as well as current value into account. However, market values (1) are not available for many potential regulatees, and (2) are subject to sharp swings not entirely caused by facts relevant to the particular case. The cost of capital of individual companies is an issue in litigation periodically and the result is virtually always a drawn-out, expensive and not clearly resolved contest. Connecticut's CEP regulations avoid these difficulties entirely by using industry average cost of capital figures. This practice has several other, equally important advantages.

- The Department's staff will not have to gather financial data about each company and go through a series of financial calculations (with which most engineers are unfamiliar). Instead, the staff will only have to decide to which industry group the regulatee belongs and look up that industry's cost of capital on a one-page table maintained by the Department.
- The Department will not have to worry about adjusting for temporary changes.

Moreover, the use of industry average data seems an acceptably accurate surrogate measure of company cost of capital rates. The CEP calculated the cost of capital for a large number of Connecticut companies and found relatively small deviations from the industry average figures. Furthermore, the courts have traditionally approved the use of industry average cost of capital figures in the regulation of individual companies.

The Department has now compiled industry-wide costs of capital averages for each of the industrial groupings in Connecticut. These averages were derived using the weighted cost of capital methodology outline above, using data drawn from such readily available and reliable sources as Standard and Poors, Financial Dynamics, the Federal Trade Commission's Quarterly Reports of Financial Data for Manufacturing Companies, and the Internal Revenue Service's Corporation Income Tax Returns. The current industry cost of capital figures are as follows:

Cost of Capital For Requested Industries

1.	Other Durable Manufacturing Products	10.69 %
2.	Lumber & Wood	10.69
3.	Textile Apparel Products	10.79
4.	Primary Metals	10.98
5.	Leather Goods	11.17
6.	Rubber & Misc. Plastics Products	11.28
7.	Tobacco Manufacturers	11.28
8.	Food & Kindred Products	11.46
9.	Electrical & Electronic Equipment	11.57
10.	Textile Mill Products	11.57
11.	Stone, Clay & Glass Products	11.57
12.	Printing and Publishing	11.67
13.	Fabricated Metals	11.76
14.	Petroleum and Coal Products	11.96
15.	Other Non-Durable Manufacturers	11.96
16.	Transportation Equipment	12.06
17.	Furniture	12.26
18.	Machinery, except Electrical	12.26
19.	Instruments & Related Products	12.83
20.	Marinas & Restaurants	14.76

FOR THE PURPOSES OF ASSESSMENT CALCULATION, USE THE COST OF CAPITAL FOR THE INDUSTRY GROUPING MOST CLOSELY RELATED TO THE SOURCE TO BE ASSESSED.

See Section B in Chapter VII of Part V below for more information.

Individual Costs of Capital

Individuals too have a cost of capital, most frequently the interest rate they must pay on money they borrow. Accordingly, in instances where civil assessments are to be imposed against individuals, the individual cost of capital will be the current average interest rate on generally available personal loans.

MAKING ADJUSTMENTS FOR TAXES

One of the key pieces of information required to operate the civil assessment formula is the regulatee's income tax bracket. It is a workably accurate assumption for over 80 percent of all companies that this rate is 48 percent. However, there are a few companies that will have lower tax rates. Moreover, most individuals and partnerships will be taxed at a lower rate, and municipalities and non-profit institutions are not subject to tax at all. For these cases the Department may wish to adjust the formula's tax assumption.

A source that does not pay income tax would be subject to a civil assessment for failing to remove fill roughly twice that of persons who are taxed at the 48 percent rate, assuming the Department decides to adjust the formula for differences in tax rate. This is so because the process of fill removal generates a series of tax deductions. These tax benefits become more significant the higher the source's tax is. Without adjustment, the formula takes all these benefits into account automatically, at the 48 percent income tax rate.

Whether and how the Department wants to go about adjusting for differences in individual regulatee's tax rates depends on whether it is dealing with corporations, individuals/partnerships, or non-profit institutions.

Corporations

The Department will not have to worry about adjusting for individual income tax rates where corporations are concerned. There are three types of corporations that may have low income tax rates: (1) companies operating at a loss, (2) companies that benefit from extraordinary tax deductions or credits, notably depletion allowances, even though they are operating profitably and (3) very small companies.

Companies operating at a loss generally do not expect to continue profitless for long. At such point as they eventually do become profitable, they will be able to use the tax advantages that accumulated during the period during which they were operating at a loss. Consequently, such companies will not alter their evaluation of what a removal project will cost them after tax significantly. Moreover, their calculations and the CEP formula take into account the after-tax costs of any commitment well into the future, and the normal businessman is most unlikely to assume that he will be operating unprofitably continuously for twenty years. In other words, the Department need not worry about adjusting the formula for companies operating temporarily at a loss.

Companies with low tax rates because of extensive deduction and credits other than for operating losses are, however, a more serious problem. Special provisions in the tax laws, most notably depletion allowances that benefit companies involved in extractive activities, can largely or entirely eliminate a company's income tax liability. U. S. Steel and Occidental Petroleum, for example, pay negligible income taxes because of the tax cover such provisions allow. Such companies will calculate the after tax cost of a removal investment differently from most companies: they will perceive such investments to be significantly more costly than most companies. However, the situation is likely to be relatively rare, especially given recent Congressional action to reduce and eliminate the oil depletion allowances. Therefore, unless the Department is dealing with an extractive industry, the Department staff should probably not worry about such cases.

Very small companies will be taxed at significantly lower rates, because the tax on corporations is graduated. This year the rate is 20 percent for the first $25,000 of taxable income, 22 percent for the second $25,000 of taxable income, and 48 percent for taxable income in excess of $50,000. This schedule of rates is effective for this year only. If it is not extended or otherwise changed, the former schedule will apply. Those rates are 22 percent for the first $25,000, 26 percent for the second $25,000, and 48 percent thereafter. Where a corporation's taxable income is sufficiently low that its overall tax rate deviates substantially from 48 percent, the Department may well want to reject the formula and to make its calculations based on the specific facts of the case.

Individuals and Partnerships

When the Department is dealing with individuals or partnerships it should initially assume a tax rate of 19 percent for individuals (the approximate Connecticut average for household heads in 1972) and 18 percent for partnerships (the approximate Connecticut average for manufacturing partners in 1969). In addition, given the wide range of effective tax rates paid by such persons, the Department will want to adjust its tax assessment formula from case to case. How it can do so at low cost is outlined in the section immediately after the brief discussion of non-profit institutions.

Non-Profit Institutions

Non-profit institutions, e.g., municipalities, do not pay income tax and therefore derive no tax benefits from whatever capital or operating and maintenance expenses they incur, in order to abate pollution. When dealing with such institutions, the Department should adjust its civil assessment formula to assume a zero tax rate.

OBTAINING INDIVIDUAL TAX RATES

When the Department decides it must obtain individual tax rates in order to set accurate civil assessments, it can obtain this information in two relatively simple ways:

* It can ask the regulatee to submit (1) its most recent balance sheets and income statements if it is a business and (2) its most recent income tax statement if the regulatee is an individual. This statement is private information, and can be obtained from the IRS only by a state tax agency. However, since the civil assessment regulations specifically provide that the Department can require such information as it needs, the tax rate itself may be obtainable. And since individuals whom the Department subjects to civil assessments are likely to be taxed at above average rates, the information will probably be provided voluntarily. The civil assessment regulations specifically provide that the Department can require such information as it needs from regulatees, specifically including financial information.

* For companies, especially publically held companies, this information is a matter of public record and may be found routinely in financial and investment publications such as Moody's Industrial Reports, Standard and Poor, or the Value Line Investment Survey. The first two of these works are available in the Connecticut State Library.

ADJUSTING THE FORMULA FOR CHANGES IN THE TAX LAWS

In applying civil assessments in individual cases, Department staff will not have to research or work through the impact of specific tax provisions. All this is handled automatically by the formula. However, from time to time the provisions of the tax laws are changed. Chapter 1 of Part III of this volume of the CEP Final Report identifies exactly where such adjustments should be made in the formula for each of the taxes that may have to be adjusted.

PART IV

PROPOSED CIVIL ASSESSMENT REGULATIONS

STATE OF CONNECTICUT
RULES AND REGULATIONS
OF
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

CONCERNING: ASSESSMENT OF CIVIL PENALTIES FOR FAILURE TO APPLY FOR A PERMIT TO PLACE COASTAL FILL.

Section 22a-6b-411(a). Title.

This section shall be known and may be cited as "Civil Penalty Regulations: Failure to Apply for a Permit to Place Coastal Fill."

Section 22a-6b-411(b). Definitions.

(1) "Civil penalties final order" means an order of the Commissioner issued pursuant to Sections 22a-6b-101 and 22a-6b-411 of the Civil Penalty Regulations which has become final by the passage of time or by the consent of the regulatee to whom the order was issued or after hearing.

(2) "Commissioner" means the Commissioner of the Department of Environmental Protection.

(3) "Deflation" means the average decrease in prices measured by changes in the Wholesale Price Index prepared by the United States Department of Labor or such other index of price changes as the Commissioner may determine is appropriate.

(4) "Department" means the Department of Environmental Protection.

(5) "Fill" means either (i) any solid or semi-solid substance, organic or inorganic, including but not limited to soil, sediment, aggregate, land, rock, gravel, clay, bog, vegetative material, mud, debris, sand, refuse, or waste that is deposited, dumped or placed in the tidal, coastal, or navigable waters of the state, or (ii) the encroachment in tidal, coastal or navigable waters resulting from the deposit, dumping or placement of such substances.

(6) "Fill without a permit" means any fill for which a valid certificate, license, or permit issued under Section 25-7d of the Connecticut General Statutes has not been secured from the Commissioner.

(7) "Inflation" means the average increase in prices measured by the changes in the Wholesale Price Index prepared by the United States Department of Labor or such other index of price changes as the Commissioner may determine is appropriate.

(8) "Person" means any individual, firm, partnership, association, syndicate, organization, company, trust, corporation, municipality,or any other legal entity, public or private.

(9) "Regulatee" means any person, excluding individuals, (i) who owns, leases, or manages real property (A) that has been, is, or may become the location of a fill and/or (B) is adjacent to tidal, coastal or navigable waters that have been, are, or may become the location of a fill or (ii) who places fill in the coastal, tidal, or navigable waters of the state.

Section 22a-6b-411(c). Civil Penalties for Failure to Apply For a Permit to Fill.

Any regulatee who places or has placed a fill without a valid certificate or permit issued by the Commissioner under Section 25-7d of the Connecticut General Statutes and/or who owns, leases, or manages real property adjacent to a fill placed without a valid certificate or permit issued by the Commissioner under Section 25-7d of the Connecticut General Statutes shall be liable for a civil penalty for each such act of placement and/or for each such fill to be assessed by the Commissioner pursuant to Section 22a-6b-(a)(1) of the Connecticut General Statutes and according to the procedures prescribed in Sections 22a-6b-101 and 22a-6b-102 of the Civil Penalty Regulations.

Section 22a-6b-411(d). Maximum Assessment for Failure to Apply for a Permit.

(1) Schedule. Any regulatee who places or has placed a fill without a permit, and/or who owns, leases, or manages real property adjacent to a fill without a permit may be assessed a civil penalty of eight hundred and eighty-five (885) dollars for each such act of placement and/or for each such fill.

(2) The amount listed in the above schedule is the average cost to regulatees applying for a permit; it therefore represents the economic advantage the typical regulatee can expect from not applying for a permit.

(3) The Commissioner shall, upon written request, provide a written explanation of how the amount in the above schedule was determined.

(4) The Commissioner shall ensure that the dollar amount assessed in particular cases shall have the same true economic value as the dollar amount listed in the above schedule had in 1975 by adjusting this dollar amount at least every two years to compensate for the inflation or deflation that has occurred since 1975 or the last previous adjustment.

(5) In no case shall an assessment under 22a-6b-411(d)(1) exceed $1,000 plus $100 for each day that fill without a permit is maintained after the regulatee has received a civil penalties final order.

(6) The Commissioner has determined that the remedies provided by this schedule will insure immediate and continued compliance and will protect (i) the public health, safety, and welfare; (ii) the public trust in the air, water, land and other natural resources of the state; and (iii) the reasonable use of property.

Section 22a-6b-411(e). Determination of Amount in Individual Cases.

(1) In setting a civil penalty in a particular case, the Commissioner shall consider all factors which he deems relevant, including but not limited to those listed below; and he may, as a result of considering these factors, lower the civil penalty. The factors he shall consider include:

(i) The amount of the assessment necessary to insure immediate and continued compliance;

(ii) The character and degree of impact the fill without a permit has on the public trust in the air, water, and land and on the natural resources of the state, especially any rare or unique natural phenomena;

(iii) The character and degree of injury to, or interference with, public health, safety or welfare which is caused or threatened to be caused by the fill without a permit.

(iv) The conduct of the person incurring the civil penalty in taking all feasible steps or procedures necessary or appropriate to comply or to abate the fill without a permit.

(v) Any prior violations by such person of statutes, regulations, orders or permits administered, adopted or issued by the Commissioner;

(vi) The economic and financial conditions of the regulatee;

(vii) The character and degree of injury to, or interference with reasonable use of property which is caused or threatened to be caused by the fill without a permit.

Section 22a-6b-411(f). Enforcement Proceedings.

(1) Hearings.

(i) Any person in receipt of a notice of violation issued pursuant to Section 22a-6b-101(a) of the Civil Penalty Regulations may apply to the Commissioner for a hearing pursuant to Section 22a-6b-101(b).

(ii) Such hearing shall be conducted by the Commissioner, a Deputy Commissioner, or a hearing officer appointed by the Commissioner. Such hearing shall be conducted pursuant to Sections 4-177 to 4-185 of the Connecticut General Statutes and to the Rules of Practice of the Department.

(2) Appeals. Any person may appeal a civil penalties final order of the Commissioner issued after a hearing to the Superior Court for Hartford County within 30 days pursuant to Section 22a-6b-(f) of the Connecticut General Statutes.

Section 22a-6b-411(g). Mitigation.

(1) General. The Commissioner may mitigate any civil penalty upon such terms as he in his discretion deems proper or necessary upon consideration of the factors set forth in Sections 22a-6b-(b) and (c) of the Connecticut General Statutes.

(2) Mitigation for Prompt Submission of a Permit Application or Information.

(i) The Commissioner shall mitigate the civil penalty assessed under Section 22a-6b-411(d) to eighty-five (85) dollars if the regulatee within twenty days after receipt of a notice of violation issued pursuant to Section 22a-6b-101(a) of the Civil Penalties Regulations or a longer period if the Commissioner allows but in no case longer than ninety days after receipt of a notice of violation, submits to the Department either a complete and satisfactory permit application for the fill or such information as the Commissioner may require to help him determine what further action the Department should take, including, but not limited to, the area, volume, dimensions and composition of the fill.

(ii) The Commissioner shall ensure that the dollar amount assessed in particular cases shall have the same true value as the dollar amount in Section 22a-6b-411(g)(2)(i) had in 1975 by adjusting this dollar amount at least every two years to compensate for the inflation or deflation that has occurred since 1975 or the last previous adjustment.

(3) Notice.

(i) The Commissioner shall maintain an up-to-date list of every case in which he lowers a civil penalty pursuant to Section 22a-6b-411(e) or in which he mitigates a civil penalty pursuant to Sections 22a-6b-411(g)(1) and (2). Each listing shall state the name and address of the regulatee, the amount of the reduction, the amount of the penalty still to be assessed, and the grounds for lowering or mitigation. The list shall be made available promptly to any person requesting to see it.

(ii) An updated copy of the list shall be sent to anyone requesting it.

(iii) The Commissioner shall also give notice of any hearing to be held regarding cases where the amount of the civil penalty may be an issue at least ten days prior to the hearing either by sending a written notice to all persons who have, within the preceding twelve months, requested copies of the list required in Section 411(g)(3)(i) or by publishing a notice once in one or more newspapers with general circulation in the town or towns in which the fill is located.

Section 22a-6b-411(h). Request for Information by the Commissioner.

(1) The Commissioner may require the regulatee to provide such additional information, including information regarding costs, as he deems necessary to effectuate the purposes of Section 22a-6b-411.

(2) Any person who files any statement, record or report with the Commissioner containing false or misleading information or other claims will be liable to criminal prosecution for a Class A misdemeanor punishable by imprisonment for a period of up to one year and a fine of up to one thousand dollars ($1,000) for each violation pursuant to Section 53a-157 of the Connecticut General Statutes.

(3) Any information disclosing trade secrets and commercial or financial information provided by a regulatee pursuant to this section will remain confidential if the regulatee so requests in a letter sent by certified mail or personal service to the Commissioner or the Director of Water Resources, except that such information may be disclosed to other officers, employees, or authorized representatives of the State concerned with carrying out these regulations or when relevant in any hearing conducted under the authority of these regulations by the Department or in any judicial proceeding, subject to such safeguards as the hearing officer or presiding judge may impose.

Section 22a-6b-411(i). Collection.

(1) Payment of the civil penalties assessed under this section may be required at such time or time intervals as the Commissioner determines will most effectively limit the Department's administrative costs and further the objectives defined in Section 22a-6b-411(d)(6).

(2) The present value of the total civil penalty assessed, calculated at the time the notice of violation is issued, shall be held constant regardless of the timing of its collection.

STATE OF CONNECTICUT
RULES AND REGULATIONS
OF
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

CONCERNING: ASSESSMENT OF CIVIL PENALTIES FOR COASTAL FILL WITHOUT A PERMIT

Section 22a-6b-412(a). Title.

This section shall be known and may be cited as "Civil Penalty Regulations: Coastal Fill Without a Permit."

Section 22a-6b-412(b). Definitions.

(1) "Benefit assessment period" means the period of time, expressed in months or portions thereof, between placement of fill by a regulatee without a valid permit issued under the provisions of Sections 25-7b and 25-7d of the General Statutes, or in violation of the conditions of any such permit, and the date he comes under a final order of the Commissioner, except that it does not include any period before the date on which this regulation becomes effective.

(2) "Beneficial return" means the net, after tax, rate of return equal to the net, after tax, cost of capital of either the regulatee or a class of similar persons on an investment equivalent to the market value of the fill or of land similar to the fill.

(3) "Civil penalties final order" means an order of the Commissioner issued pursuant to Sections 22a-6b-101 and 22a-6b-412 of the Civil Penalty Regulations which has become final by the passage of time or by the consent of the regulatee to whom the order was issued or after hearing.

(4) "Commissioner" means the Commissioner of the Department of Environmental Protection.

(5) "Compliance timetable" means the schedule of dates in a final order that determines when a regulatee must complete specific compliance steps in order to come into compliance with Sections 25-7b and 25-7d of the General Statutes.

(6) "Cost of capital" means, as determined by the Commissioner, either: (i) the weighted average of the marginal rates the Commissioner finds a regulatee or class of regulatees typically must pay per year for debt and owner's equity or (ii) the annual rate of return or of savings that the Commissioner finds a regulatee or class of regulatees typically could achieve with a sum of money equal to the cost of removal.

(7) "Cost of removal" means the net, after tax estimated present value of excavation costs, hauling costs, disposal costs, fill re-sale, modification costs, and all other costs and savings the Commissioner determines the regulatee would experience in order to remove a fill without a permit, taking into account, among other factors, inflation and a discount rate equal to the cost of capital.

(8) "Deflation" means the average decrease in prices measured by changes in the Wholesale Price Index prepared by the United States Department of Labor or such other index of price changes as the Commissioner may determine is appropriate.

(9) "Department" means the Department of Environmental Protection.

(10) "Fill" means either (i) any solid or semi-solid substance, organic or inorganic, including but not limited to soil, sediment, aggregate, land, rock, gravel, clay, bog, vegetative material, mud, debris, sand, refuse, or waste that is deposited, dumped or placed in tidal, coastal, or navigable waters of the state, or (ii) the encroachment in tidal, coastal, or navigable waters resulting from the deposit, dumping, or placement of such substances.

(11) "Fill without a permit" means any fill for which a valid certificate, license, or permit issued under Section 25-7d of the Connecticut General Statutes has not been secured from the Commissioner.

(12) "Final order" means an order of the Commissioner issued pursuant to Section 22a-6 in order to enforce any of Sections 25-7(b-e) of the Connecticut General Statutes which has become final by the passage of time or by the consent of the regulatee to whom the order was issued or after hearing.

(13) "Inflation" means the average increase in prices measured by the changes in the Wholesale Price Index prepared by the United States Department of Labor or such other index of price changes as the Commissioner may determine is appropriate.

(14) "Market value" means the estimated price of the fill or of land similar to the fill which would in all probability result from fair negotiations where the seller is willing to sell and the buyer desires to buy taking into consideration all those elements actual or potential which a seller or prospective buyer could reasonably urge as affecting the price of the fill or land similar to the fill.

(15) "Person" means any individual, firm, partnership, association, syndicate, organization, company, trust, corporation, municipality or any other legal entity, public or private.

(16) "Regulatee" means any person, excluding individuals, (i) who owns, leases, or manages real property (A) that has been, is, or may become the location of a fill and/or (B) is adjacent to lands beneath tidal, coastal, or navigable waters that have been, are, or may become the location of a fill or (ii) who places fill in tidal, coastal, or navigable waters of the state.

(17) "Remove" means, but shall not be limited to, excavate, dig, dredge, suck, bulldoze, dragline, or blast, directly or indirectly.

Section 22a-6b-412(c). Civil Penalties for Fill Without a Permit.

Any regulatee who places or has placed fill without a valid certificate or permit issued by the Commissioner under Section 25-7d of the Connecticut General Statutes and/or who owns, leases, or manages real property adjacent to a fill placed without such a valid certificate or permit shall be liable for a civil penalty for each such act of placement and/or for each such fill to be assessed by the Commissioner pursuant to Section 22a-6b-(a)(2) of the Connecticut General Statutes and according to procedures prescribed in Sections 22a-6b-101 and 102 of the Civil Penalty Regulations.

Section 22a-6b-412(d). Maximum Assessments for Fill Without a Permit.

(1) General. Pursuant to Section 25-7e of the General Statutes any fill placed in the tidal, coastal, or navigable waters of the state or any activity carried out incidental to its placement without a certificate or permit from the Commissioner is a public nuisance. The Commissioner may assess a civil penalty for each such act of placement and/or for each such fill against any regulatee placing it or allowing it to remain based on the economic benefit accruing to the regulatee for the entire period during which he delays removing the nuisance.

(2) Schedule of Maximum Assessments. For each month that a regulatee fails to remove a fill without a permit he may be assessed an amount for each such fill no greater than the amount listed in the following schedule for regulatees with comparable costs of removal and for fills with comparable market value.

SCHEDULE OF MAXIMUM ALLOWABLE MONTHLY CIVIL PENALTIES FOR A FILL WITHOUT A PERMIT - WITH SPECIFIED REMOVAL COSTS AND MARKET VALUE

Removal Costs	Market Value $0-5000	$5001-10,000	$10,001-20,000	$20,001-30,000	$30,001-50,000	$50,001-75,000	$75,001-100,000	$100,001-150,000	$150,001-200,000	$200,001-500,000	$500,001-1,000,000	$1,000,001-3,000,000	$3,000,001-and above
$0-5,000	104.	189.	359.	529.	870.	1296.	1721.	2573.	3424.	8533.	17047.	51105.+	•
$5001-10,000	122.	207.	378.	548.	888.	1314.	1740.	2591.	3443.	8552.	17066.	51124.+	•
$10,001-20,000	159.	244.	415.	585.	925.	1351.	1777.	2628.	3480.	8589.	17103.	51161.+	•
$20,001-30,000	196.	281.	452.	622.	963.	1388.	1814.	2665.	3517.	8626.	17140.	51198.+	•
$30,001-50,000	270.	355.	526.	696.	1037.	1462.	1888.	2739.	3591.	8700.	17214.	51272.+	•
$50,001-75,000	363.	448.	618.	789.	1129.	1555.	1981.	2832.	3683.	8792.	17307.	51364.+	•
$75,001-100,000	455.	540.	711.	881.	1222.	1647.	2073.	2925.	3776.	8885.	17399.	51457.+	•
$100,001-150,000	640.	726.	896.	1066.	1407.	1832.	2258.	3110.	3961.	9070.	17584.	51642.+	•
$150,001-200,000	826.	911.	1081.	1251.	1592.	2018.	2443.	3295.	4146.	9255.	17769.	51827.+	•
$200,001-500,000	1936.	2021.	2192.	2362.	2702.	3128.	3554.	4405.	5257.	10365.	18880.	52938.+	•
$500,001-1,000,000	3787.	3872.	4043.	4213.	4553.	4979.	5405.	6256.	7108.	12216.	20731.	54789.+	•
$1,000,001-5,000,000	18594.	18680.	18850.	19021.	19361.	19787.	20213.	21064.	21916.	27024.	35539.+	•	•
$5,000,001-15,000,000	55614.+	55699.+	55870.+	•	•	•	•	•	•	•	•	•	•
$15,000,001-and above	•	•	•	•	•	•	•	•	•	•	•	•	•

• No more than $25,000 plus $1,000 for each day the fill is not removed after the regulatee has received a civil penalties final order.

+ Once the $25,000 of the maximum is used up, the maximum monthly charge will be $1,000 times the number of the days in the month.

(3) Explanation. The maximum amounts set forth in this schedule represent the sum of (i) the economic advantage accruing to a regulatee from one month's delay in incurring removal costs assuming economic and tax conditions all tending to increase the value to the regulatee of such delay, and (ii) the beneficial return a regulatee could expect in one month from the fill without a permit or from similar land, assuming economic and tax conditions all tending to increase the value of such a fill to the regulatee. The Commissioner shall, upon written request, provide a written explanation of the methods used to calculate the amounts in this schedule.

(4) The Commissioner shall impose lesser assessments pursuant to Section 22a-6b-412(e)(1) and (2) if he finds the probable advantages of failing to remove fill without a permit are smaller than indicated in this schedule and he may further lower these penalties pursuant to Sections 22a-6b-412(e)(5) and 22a-6b-412(g).

(5) In no case shall the assessment exceed $25,000, plus $1,000 for each day that the fill without a permit is maintained after the regulatee has received a civil penalties final order.

(6) The Commissioner has determined that the remedies provided by these schedules will insure immediate and continued compliance and will protect (i) the public health, safety, and welfare; (ii) the public trust in the air, water, land, and other natural resources of the state; and (iii) the reasonable use of property.

Section 22a-6b-412(e). Determination of Amount in Individual Cases.

(1) The Commissioner shall determine the amount of the monthly civil penalty he may assess for each fill without a permit by calculating the sum of (i) the amount the regulatee has saved each month by delay in incurring the expenses of removal, and (ii) the beneficial return the regulatee could expect from the fill or from similar land.

(2) The Commissioner shall calculate the total civil penalty by taking the product of the number of months or fractions thereof in the benefit assessment period and the monthly civil penalty.

(3) The Commissioner shall provide a written explanation of this methodology upon request. A record of the calculations used to determine a particular assessment will be available for public inspection at the Office of the Director of the Department's Water Resources Unit except to the extent that the Commissioner is required to maintain the confidentiality of certain information pursuant to Section 22a-6b-412(i)(3).

(4) In no case shall an individual assessment exceed either (i) the maximum amount Section 22a-6b-412(d) would allow per month for a regulatee failing to remove a fill without a permit with the same costs of removal and beneficial return, or (ii) the total civil penalty due during the entire benefit assessment period, $25,000 plus $1,000 for each day the fill without a permit is not removed after the regulatee has received a civil penalties final order.

(5) In setting a civil penalty in a particular case, the Commissioner shall consider all factors which he deems relevant, including but not limited to those listed below; and he may, as a result of considering and balancing these factors, lower the civil penalty. The factors he shall consider include:

(i) The amount of the assessment necessary to insure immediate and continued compliance;

(ii) The character and degree of impact the fill without a permit has on the public trust in the air, water, and land and on the natural resources of the state, especially any rare or unique natural phenomena;

(iii) The character and degree of injury to, or interference with, public health, safety or welfare which is caused or threatened to be caused by the fill without a permit;

(iv) The conduct of the person incurring the civil penalty in taking all feasible steps or procedures necessary or appropriate to comply or to correct the fill without a permit;

(v) Any prior violations by such person of statutes, regulations, orders or permits administered, adopted or issued by the Commissioner;

(vi) The economic and financial conditions of the regulatee;

(vii) The character and degree of injury to, or interference with reasonable use of property which is caused or threatened to be caused by the fill without a permit.

Section 22a-6b-412(f). Enforcement Proceedings.

(1) Hearings.

(i) Any person in receipt of a notice of violation issued pursuant to Section 22a-6b-101(a) of the Civil Penalty Regulations may apply to the Commissioner for a hearing pursuant to Section 22a-6b-101(b).

(ii) Such hearing shall be conducted by the Commissioner, a Deputy Commissioner, or a hearing officer appointed by the Commissioner. Such hearing shall be conducted pursuant to Section 4-177 to 4-185 of the General Statutes and to the Rules of Practice of the Department.

(iii) If the Commissioner, Deputy Commissioner, or hearing officer presiding at the hearing determines that information important to an accurate determination of all or part of the civil penalty amount is not available at the time of the hearing but will become available later, he may defer determining the amount of the civil penalty due until he establishes that the previously missing information is available, at which time he shall promptly reconvene the hearing regarding the amount of the civil penalty due. The Commissioner may not collect any portion of the civil penalty until this hearing is completed and a civil penalties final order issued.

(2) Appeals. Any person may appeal any civil penalties final order of the Commissioner issued after a hearing to the Superior Court for Hartford County within thirty days pursuant to Section 22a-6b-(f) of the General Statutes and Sections 22a-6b-100 to 102 of the Civil Penalty Regulations.

Section 22a-6b-412(g). Mitigation and Correction.

(1) General. The Commissioner may mitigate any civil penalty upon such terms as he in his discretion deems proper or necessary upon consideration of the factors set forth in Sections 22a-6b-(b) and (c) of the Connecticut General Statutes, as amended.

(2) Correction of Penalties.

(i) A regulatee in receipt of a notice of violation issued pursuant to Section 22a-6b-101(a) of the Civil Penalty Regulations may petition the Commissioner for correction of the civil penalty assessed against him at any time up to four months after the Commissioner finds that the regulatee has come into compliance. Such petition shall set forth in writing any evidence that the cost of removal or beneficial return of benefit assessment period has been less than the Commissioner had initially determined in assessing the civil penalty, and it shall be sent by certified mail or personal service to the Commissioner or the Director of Water Resources.

(ii) The Commissioner may, in response to such a petition, lower an assessment if he determines that the evidence in the petition establishes that factors used in calculating the initial assessment resulted in significant error. If the Commissioner takes no action in response to such a petition or if his response is not satisfactory to the regulatee, the regulatee may obtain a hearing of right once it has come into compliance or at any other time specified in a final order or a civil penalties final order. Following such a hearing the Commissioner shall mitigate the civil penalty if and to the extent that the actual costs of removal or beneficial return or benefit assessment period has been less than he had initially determined.

(iii) Where the short term use value of the land created by the illegal fill after receipt of a notice of violation by the regulatee is shown to be substantially less than its beneficial return or the beneficial return on similar land, the Commissioner may consider this fact in determining whether his inital assessment was excessive.

(iv) Refunds shall be made with interest calculated from the time of payment and at the cost of capital rate used to assess the civil penalty.

(3) Reduction of the Assessment Period for Delays Beyond the Regulatee's Control. The Commissioner shall exclude from the benefit assessment period such periods of non-compliance as the regulatee proves have been caused by the United States Army Corps of Engineers; strikes or lockouts; riots, wars, or other acts of violence; floods, hurricanes, or other Acts of God; or other equally severe, unforeseeable and uncorrectible events, where such acts or events were occasioned directly upon the regulatee or a person under contract to the regulatee. In addition, the Commissioner shall exclude from the assessment period such periods of non-compliance as were occasioned by delays attributable to the Water Resources Unit of the Department in excess of reasonable processing times. Nothing in this section shall prohibit a regulatee from proposing, or the Department from accepting, a compliance timetable which excludes from the assessment period periods of non-compliance caused by other acts or events beyond the control of the regulatee, such as contractor's or supplier's delays.

(4) Notice.

(i) The Commissioner shall maintain an up-to-date list of every case in which he lowers a civil penalty pursuant to Section 22a-6b-412(e) or in which he mitigates a civil penalty pursuant to Section 22a-6b-412(g)(1-4) or in which he lowers or mitigates a penalty pursuant to Sections 22a-6b-411 or 22a-6b-413. Each listing shall state the name and address of the regulatee, the amount of the reduction, the amount of the civil penalty still to be assessed, and the grounds for such lowering or mitigation. The list shall be made available promptly to any person requesting to see it.

(ii) An updated copy of the list shall be sent to anyone requesting it.

(iii) The Commissioner shall also give notice at least ten days prior to any hearing where the amount of a civil penalty may be an issue either by sending a written notice to all persons who have within the preceeding twelve months, requested copies of the lists required in Section 412(g)(4)(i) or by publishing a notice once in one or more newspapers with general circulation in the town or towns in which the fill is located.

Section 22a-6b-412(h). Limited Inclusion of Past Failure to Remove in the Assessment Period.

The Commissioner may include the period of pre-detection violation by the regulatee in the benefit assessment period used to calculate the civil penalty as prescribed in Section 22a-6b-412(e) subject to the following limitations: (1) no benefit assessment period shall begin before the date on which this regulation becomes effective; (2) No benefit assessment period shall include a pre-detection period greater than two years.

Section 22a-6b-412(i). Request for Information by the Commissioner.

(1) The Commissioner may require the regulatee to provide such additional information, including information regarding (i) the costs of removal, and (ii) the market value of the fill and its short term use value, as he deems necessary to effectuate the purposes of Section 22a-6b-412.

(2) Any person who files any statement, record or report with the Commissioner containing false or misleading information or other claims will be liable to criminal prosecution for a Class A misdemeanor punishable by imprisonment for a period of up to one year and a fine of up to one thousand dollars ($1,000) for each violation pursuant to Section 53a-157 of the Connecticut General Statutes.

(3) Any information disclosing trade secrets and commercial or financial information provided by a regulatee pursuant to this section will be kept confidential if the regulatee so requests in a letter sent by certified mail or personal service to the Commissioner or the Director of Water Resources, except that such information may be disclosed to other officers, employees, or authorized representatives of the State concerned with carrying out these regulations or when relevant in any hearing conducted by the Department under authority of these regulations or in any judicial proceeding, subject to such safeguards as the hearing officer or presiding judge may impose.

Section 22a-6b-412(j). Collection.

(1) Payment of the civil penalties assessed under this section may be required monthly, or at such time or other time intervals as the Commissioner determines will most effectively limit the Department's administrative costs and further the objectives defined in Section 22a-6b-412(d)(6).

(2) The present value of the total civil penalty assessed, calculated at the time the notice of violation is issued, shall be held constant regardless of the timing of its collection.

STATE OF CONNECTICUT
RULES AND REGULATIONS
OF
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

CONCERNING: ASSESSMENT OF CIVIL PENALTIES FOR COASTAL FILL NOT IN COMPLIANCE WITH THE TERMS OF AN ORDER OR PERMIT

Section 22a-6b-413(a). Title.

This section shall be known and may be cited as "Civil Penalty Regulations: Coastal Fill Not in Compliance with the Terms of an Order or Permit."

Section 22a-6b-413(b). Definitions.

(1) "Beneficial return" means the net, after tax, rate of return equal to the net, after tax, cost of capital of either the regulatee or a class of similar persons on an investment equivalent to the market value of the fill or of land similar to the fill.

(2) "Civil penalties final order" means an order of the Commissioner issued pursuant to Sections 22a-6b-101 and 22a-6b-413 of the Civil Penalty Regulations which has become final by the passage of time or by the consent of the regulatee to whom the order was issued or after hearing.

(3) "Commissioner" means the Commissioner of the Department of Environmental Protection.

(4) "Compliance timetable" means the schedule of dates in a final order that determines when a regulatee must complete specific compliance steps in order to come into compliance with Sections 25-7b and 25-7d of the Connecticut General Statutes.

(5) "Cost of capital" means, as determined by the Commissioner, either: (i) the weighted average of the marginal rates the Commissioner finds a regulatee or class of regulatees typically must pay per year for debt and owner's equity or (ii) the annual rate of return or of savings that the Commissioner finds a regulatee or class of regulatees typically could achieve with a sum of money equal to the cost of removal.

(6) "Cost of removal" means the net, after tax estimated present value of excavation costs, hauling costs, disposal costs, fill re-sale, modification costs and all other costs and savings the Commissioner determines the regulatee would experience in removing a fill not in compliance with the terms of an order or permit, taking into account, among other factors, inflation and a discount rate equal to the cost of capital.

(7) "Deflation" means the average decrease in prices measured by changes in the Wholesale Price Index prepared by the United States Department of Labor or such other index of price changes as the Commissioner may determine is appropriate.

(8) "Department" means the Department of Environmental Protection.

(9) "Emergency Cease and Desist Order" means an order of the Commissioner issued pursuant to Section 22a-7 of the Connecticut General Statutes in order to enforce any of sections 25-7(b-e), inclusive, of the Connecticut General Statutes which is final upon receipt by the regulatee.

(10) "Fill" means either (i) any solid or semi-solid substance, organic or inorganic, including but not limited to soil, sediment, aggregate, land, rock, gravel, clay, bog, vegetative material, mud, debris, sand, refuse or waste that is deposited, dumped or placed in tidal, coastal, or navigable waters of the state, or (ii) the encroachment in tidal, coastal or navigable waters resulting from the deposit, dumping or placement of such substances.

(11) "Fill without a permit" means any fill for which a valid certificate, license, or permit issued under Section 25-7d of the Connecticut General Statutes has not been secured from the Commissioner.

(12) "Final order" means an order of the Commissioner issued pursuant to Section 22a-6b in order to enforce any of Sections 25-7(b-e), inclusive, of the Connecticut General Statutes which has become final by the passage of time or by the consent of the regulatee to whom the order was issued or after hearing.

(13) "Inflation" means the average increase in prices measured by the changes in the Wholesale Price Index prepared by the United States Department of Labor or such other index of price changes as the Commissioner may determine is appropriate.

(14) "Market value" means the estimated price of the fill or of land similar to the fill which would in all probability result from fair negotiations where the seller is willing to sell and the buyer desires to buy taking into consideration all those elements actual or potential which a seller or prospective buyer could reasonably urge as affecting the price of the fill or land similar to the fill.

(15) "Order" means either (i) a final order or (ii) an emergency cease and desist order.

(16) "Order assessment period" means the period of time, expressed in months or portions thereof, (i) that a person under a final order or emergency cease and desist order is behind in conforming to that order's compliance timetable as measured by the time that has elapsed between the date of a scheduled deadline and the date that the abatement or compliance measures called for in the scheduled deadline are actually completed, or (ii) during which a regulatee has failed to comply with a requirement, term or condition of a final order, an emergency cease and desist order, or a permit.

(17) "Permit" means a certificate or permit issued pursuant to Section 25-7d of the Connecticut General Statutes.

(18) "Person" means any individual, firm, partnership, association, syndicate, organization, company, trust, corporation, municipality or any other legal entity, public or private.

(19) "Regulatee" means any person, excluding individuals, (i) who owns, leases, or manages real property (A) that has been, is, or may become the location of a fill and/or (B) is adjacent to tidal, coastal or navigable waters that have been, are, or may become the location of a fill, or (ii) who places fill in tidal, coastal or navigable waters of the State.

(20) "Remove" means, but shall not be limited to excavate, dig, dredge, suck, bulldoze, dragline, or blast, directly or indirectly.

(21) "Scheduled deadline" means the date in a compliance timetable by which an abatement or compliance measure is scheduled to be completed; such deadline may be for any of the intermediate steps in the compliance timetable or for the final step at which compliance is to be completed.

Section 22a-6b-413(c). Civil Penalties for Fill not in Compliance with the Terms of an Order or Permit.

Any regulatee under but not in compliance with the terms of (i) a final order of the Commissioner issued pursuant to Section 22a-6b of the Connecticut General Statutes to remove, modify and/or abate a fill without a permit, (ii) a permit issued pursuant to Section 25-7d of the Connecticut General Statutes, and/or (iii) an emergency cease and desist order issued pursuant to Section 22a-7 of the Connecticut General Statutes to remove, modify, abate a fill without a permit, and/or cease further placement of fill shall be liable for a civil penalty assessed by the Commissioner pursuant to Section 22a-6b-(a)(3) and/or 22a-6b-(a)(4) of the Connecticut General Statutes in accordance with the procedures prescribed in Section 22a-6b-101 and 102 of the Civil Penalty Regulations.

Section 22a-6b-413(d). Schedule of Maximum Assessments.

(1) Any regulatee under but not in compliance with the terms of (i) a final order of the Commissioner issued pursuant to Section 22a-6b of the Connecticut General Statutes to remove, modify and/or abate a fill without a permit, (ii) a permit issued pursuant to Section 25-7d of the Connecticut General Statutes, and/or (iii) an emergency cease and desist order issued pursuant to Section 22a-7 to remove, modify, abate, and/or cease further placement of fill may be assessed a civil penalty no larger than the product of (i) the maximum monthly civil penalty the Commissioner may assess under the schedule of maximum assessments of Section 22a-6b-412(d) against a person for a fill without a permit with the same costs of removal and market value of the fill or land similar to the fill and (ii) the number of months and/or fractions thereof in the order assessment period.

(2) The Commissioner shall, upon written request, provide a written explanation of how these maximum assessments are calculated to any regulatee.

(3) The Commissioner shall impose lesser penalties pursuant to Section 22a-6b-413(e)(1) and (2) if he finds the expected advantages of avoiding compliance are smaller than indicated in this schedule and he may further lower these penalties pursuant to Sections 22a-6b-413(e)(5) and/or 22a-6b-413(g).

(4) In no case shall the assessment exceed (i) $25,000, plus $1,000 for each day that noncompliance with the terms of (A) a permit, or (B) a final order to remove, modify and/or abate continues after the regulatee has received a civil penalties final order or (ii) $25,000 plus $5,000 for each day that violation of an emergency cease and desist order continues after the regulatee has received a civil penalties final order.

(5) The Commissioner has determined that the maximum remedies provided in this schedule will insure immediate and continued compliance and will protect (i) the public health, safety, and welfare; (ii) the public trust in the air, water, land and other natural resources of the state; and (iii) the reasonable use of property.

Section 22a-6b-413(e). Determination of Amount in Individual Cases.

(1) The amount of the monthly civil penalty the Commissioner may assess for each instance in which a regulatee is not in compliance with the terms of an order or permit shall be the sum of (a) the value of delaying incurring the cost of removal and (b) the beneficial return the regulatee could expect from the fill or from land similar to the fill.

(2) The Commissioner shall calculate the total civil penalty by multiplying the monthly civil penalty defined in Section 22a-6b-413(e)(1) by the number of months or fractions thereof in the order assessment period.

(3) The Commissioner shall provide a written general explanation of how a penalty amount is calculated upon request. A record of the calculations used to determine a particular assessment will be available for public inspection at the Office of the Director of the Department's Water Resources Unit except to the extent that the Commissioner is required to maintain the confidentiality of certain information pursuant to Section 22a-6b-413(h).

(4) In no case shall an individual assessment exceed (i) the maximum amount Section 22a-6b-412(d) would allow the Commissioner to assess per month against a regulatee for a fill without a permit with the same cost of removal and market value of the fill or lands similar to the fill times the number of months and/or fractions thereof in the order assessment period or (ii) $25,000 plus $1,000 for each day that noncompliance with the terms of a final order or permit continues after the regulatee has received a civil penalties final order or (iii) $25,000, plus $5,000 for each day that violation of an emergency cease and desist order continues after the regulatee has received a civil penalties final order.

(5) In setting a civil penalty in a particular case, the Commissioner shall consider all factors which he deems relevant, including but not limited to those listed below; and he may, as a result of considering and balancing these factors, lower the civil penalty. The factors he shall consider include:

(i) The amount of the assessment necessary to insure immediate and continued compliance;

(ii) The character and degree of impact that noncompliance with the order or permit has on the public trust in the air, water, and land and on the natural resources of the state, especially any rare or unique natural phenomena;

(iii) The character and degree of injury to, or interference with, public health, safety or welfare which is caused or threatened to be caused by the regulatee's noncompliance with the order or permit;

(iv) The conduct of the person incurring the civil penalty in taking all feasible steps or procedures necessary or appropriate to comply with the order or permit;

(v) Any prior violations by such person of statutes, regulations, orders or permits administered, adopted or issued by the Commissioner;

(vi) The economic and financial conditions of the regulatee;

(vii) The character and degree of injury to, or interference with reasonable use of property which is caused or threatened to be caused by the regulatee's noncompliance with the order or permit.

Section 22a-6b-413(f). Enforcement Proceedings.

(1) Hearings.

(i) Any person in receipt of a notice of violation issued pursuant to Section 22a-6b-101(a) of the Civil Penalty Regulations may apply to the Commissioner for a hearing pursuant to Section 22a-6b-101(b).

(ii) Such hearing shall be conducted by the Commissioner, a Deputy Commissioner, or a hearing officer appointed by the Commissioner. Such hearing shall be conducted pursuant to Sections 4-177 to 4-185, inclusive, of the General Statutes and to the Rules of Practice of the Department.

(iii) If the Commissioner, Deputy Commissioner, or hearing officer presiding at the hearing determines that information important to an accurate determination of all or part of the civil penalty amount is not available at the time of the hearing but will become available later, he may defer determining the amount of the civil penalty due until he establishes that the previously missing information is available, at which time he shall promptly reconvene the hearing regarding the amount of the civil penalty due. The Commissioner may not collect any portion of the civil penalty until this hearing is completed and a civil penalties final order issued.

(2) Appeals. Any person may appeal a civil penalties final order of the Commissioner issued after a hearing to the Superior Court of Hartford County within thirty days pursuant to Section 22a-6b-(f) of the Connecticut General Statutes and Sections 22a-6b-101 to 102 of the Civil Penalty Regulations.

Section 22a-6b-413(g). Mitigation and Correction.

(1) General. The Commissioner may mitigate any civil penalty upon such terms as he in his discretion deems proper or necessary upon consideration of the factors set forth in Sections 22a-6b-(b) and (c) of the Connecticut General Statutes.

(2) Correction of Penalties.

(i) A regulatee in receipt of a notice of violation issued pursuant to Section 22a-6b-101(a) and Section 22a-6b-413(d) of the Civil Penalty Regulations may petition the Commissioner for correction of the civil penalty assessed against him at any time up to four months after the Commissioner finds that the regulatee has come into compliance. Such petition shall set forth in writing any evidence that the cost of removal or market value of the fill has been or would be less than the Commissioner had initially determined in assessing the civil penalty, and it shall be sent by certified mail or personal service to the Commissioner or to the Director of Water Resources.

(ii) The Commissioner may, in response to such a petition or at his own initiative, lower an assessment he determines was excessive. If the Commissioner takes no action in response to such a petition, or if his response is not satisfactory to the regulatee, the regulatee may obtain a hearing of right once it has come into compliance or at any other time specified in a final order or a civil penalties final order. Following such a hearing the Commissioner shall mitigate the civil penalty if and to the extent that the cost of removal or the market value of the fill can be shown to be less than he had initially determined.

(iii) The Commissioner shall also mitigate the civil penalty if and to the extent that the regulatee comes into actual final compliance with less delay than the total number of days of delay for which assessments have previously been made while the regulatee was under an order or permit.

(iv) Refunds shall be made with interest calculated from the time of payment at the cost of capital rate used to assess the civil penalty.

(3) Reduction of the Order Assessment Period for Delays Beyond the Regulatee's Control. The Commissioner shall exclude from the order assessment period such period of non-compliance as the regulatee proves have been caused by the United States Army Corps of Engineers; strikes or lockouts; riots, wars or other acts of violence; floods, hurricanes, or other Acts of God; or other equally severe, unforeseeable and uncorrectible events; where such acts or events were occasioned directly upon the regulatee or a person under contract to the regulatee. In addition, the Commissioner shall exclude from the order assessment period such periods of non-compliance as were occasioned by delays attributable to the Water Resources Unit of the Department in excess of reasonable processing times. Nothing in this section shall prohibit a regulatee from proposing, or the Department from accepting, a compliance timetable which excludes from the order assessment period periods of non-compliance caused by other acts or events beyond the control of the regulatee, such as contractors' or suppliers' delays.

(4) Notice.

(i) The Commissioner shall maintain an up-to-date list, which shall be readily available for public inspection, of every case in which he lowers a civil penalty pursuant to Section 22a-6b-413(e) or in which he mitigates a civil penalty pursuant to Section 22a-6b-413(g)(1-3). Each listing shall state the name and address of the regulatee, the amount of the reduction, the amount of the penalty still to be assessed, and the grounds for lowering or mitigation.

(ii) An updated copy of the list shall be sent to anyone requesting it.

(iii) The Commissioner shall also give notice of any hearing to be held regarding cases where the amount of a civil penalty may be an issue at least ten days prior to the hearing either by sending a written notice to all persons who have, within the preceding twelve months, requested copies of the list required - Sections 413(g)(i-ii) or by publishing a notice in one or more newspapers of general circulation in the town or towns in which the fill is located.

Section 22a-6b-413(h). Request for Information by the Commissioner.

(1) The Commissioner may require the regulatee to provide such additional information, including but not limited to information regarding costs of removal and the market value of the fill, as he deems necessary to effectuate the purposes of Section 22a-6b-413.

(2) Any person who files any statement, record or report with the Commissioner containing false or misleading information or other claims will be liable to criminal prosecution for a Class A misdemeanor punishable by imprisonment for a period of up to one year and a fine of up to one thousand dollars ($1,000) for each violation pursuant to Section 53a-157 of the Connecticut General Statutes.

(3) Any information disclosing trade secrets and commercial or financial information provided by a regulatee pursuant to this section will remain confidential if the regulatee so requests in a letter sent by certified mail or personal service to the Commissioner or to the Director of the Water Resources Unit of the Department, except that such information may be disclosed to other officers, employees, or authorized representatives of the State concerned with carrying out these regulations or when relevant in any hearing conducted under the authority of these regulations by the Department or in any judicial proceeding, subject to such safeguards as the hearing officer or presiding judge may impose.

Section 22a-6b-413(i). Collection.

(1) Payment of the civil penalties assessed under this section may be required monthly, or at such time or time intervals as the Commissioner determines will most effectively limit the Department's administrative costs and further the objectives defined in Section 22a-6b-413(d)(5).

(2) The present value of the total civil penalty assessed, calculated at the time the notice of violation is issued, shall be held constant regardless of the time of its collection.

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PART V

OPERATING MANUAL FOR THE APPLICATION OF CIVIL ASSESSMENTS

(This document was unavailable at the time of printing. It will be available from Mr. Glenn Gross, Department of Environmental Protection, 71 Capitol Avenue, Hartford, CT 06115, or from the Director of the Water Resources Unit, Department of Environmental Protection, State Office Building, Hartford, CT., 06115.)

PART VI

THE IMPACT OF ECONOMIC CIVIL ASSESSMENTS ON THE ADMINISTRATIVE COSTS OF ENFORCEMENT

PART VI

THE IMPACT OF ECONOMIC CIVIL ASSESSMENTS ON THE ADMINISTRATIVE COSTS OF ENFORCEMENT

INTRODUCTION

This Part contains the findings of CEP's study of administrative costs of the Water Resources Unit for both its present enforcement procedures for coastal fill and the procedures it would follow under Civil Assessment Regulations 22a-6b-411 to 413, inclusive. The major findings are as follows:

(1) Increased voluntary compliance should cut caseloads and thereby save the Unit up to 76 percent of its total enforcement costs for commercial and industrial coastal fill.

(2) When enforcement action is required, economic civil assessments should cut the current per case cost of the Unit's most common response, the Order to Remove or Get a Permit, by 14 percent.

(3) Civil Assessments will cut the typical lapse time between detection and final Department action in Order to Remove or Get a Permit cases by 43 percent.

(4) For the less common Cease and Desist Order case, civil assessments will cut Unit costs 45 percent per case by reducing the frequency of costly and disruptive hearings.

Furthermore, the availability of civil assessment tools will lead to better enforcement of the statutory permit requirement for fill below the mean high water mark.

This Part is divided into two Chapters. Chapter I concerns the Order to Remove or Get a Permit, and compares the costs and delay associated with the present system to those which will exist under the Civil Assessment Regulations. Chapter II contains a similar cost comparison for cases handled by Cease and Desist Orders. An Addendum explains the methodology employed in the study, and provides detailed back-up information to Chapter I, including comprehensive flow charts and step descriptions for both the present and civil assessment procedures.

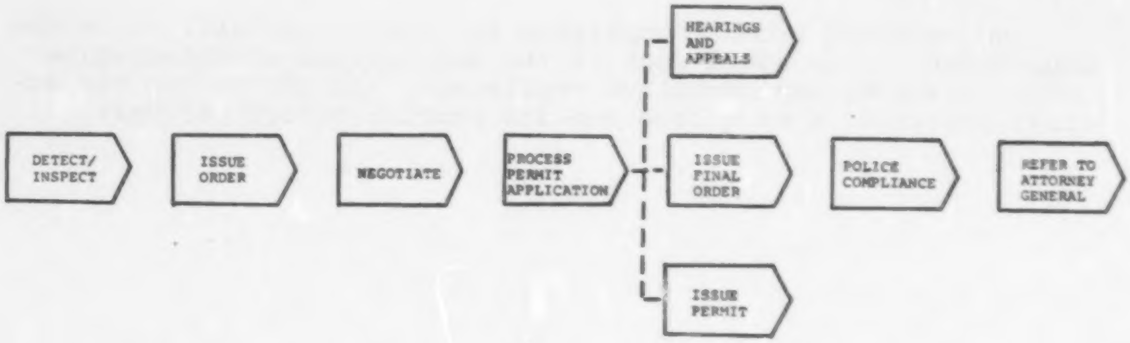
CHAPTER I

THE ORDER TO REMOVE OR GET A PERMIT

PRESENT PROCEDURES

The Water Resources Unit typically deals with unpermitted fills by means of the Order to Remove or Get a Permit. This order gives a regulatee 30 days either to remove the fill or to apply for a permit for it. A simplified flow chart of the procedures followed under this order follows:

Most Common Steps in the Order to Remove or Get a Permit


DETECT/ INSPECT
ISSUE ORDER
NEGOTIATE
PROCESS PERMIT APPLICATION
HEARINGS AND APPEALS
ISSUE FINAL ORDER
ISSUE PERMIT
POLICE COMPLIANCE
REFER TO ATTORNEY GENERAL

This procedure is generally ineffective because it has no teeth. Fillers never take the first option offered by the order, i.e., removing their fill. Those who take the second option and do not receive a permit simply remain in noncompliance. And a sizable percentage of fillers take neither of the options suggested by the order; instead they choose the third option - to ignore the order. Theoretically the Department would go to court when so flouted, but to date this response has been ineffective.

The Order to Remove or Get a Permit is expensive as well as ineffective. The average Order to Remove or Get a Permit case costs the Department close to $290 to process, with cases that receive hearings running over $500 each. These cases typically take five months of calls, letters, meetings, and administrative proceedings before the regulatee's duty to modify or remove the fill is reaffirmed. And then, even when it is reaffirmed, it is still almost sure to be ignored.

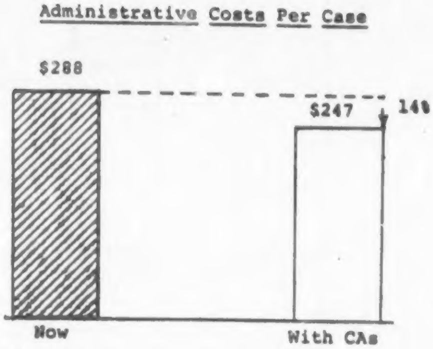
CIVIL ASSESSMENTS

Adding economic civil assessments to the present Order to Remove or Get a Permit process will cut enforcement costs and significantly improve compliance by adding just the right level of incentive at the key decision points in the process. When an illegal fill is detected, the Department will be able to use the regulatee's civil assessment liability under Sections 411 and 412 to induce (1) prompt submission of whatever information the Department needs to decide what should be done in the case, (2) caution in dragging out the negotiating process, and (3) a willingness to agree to an order to remove or modify rather than attempt to delay it through hearings and perhaps appeals. If the regulatee moves promptly to come into compliance, the Department would either sharply limit or not impose the Section 411-412 permit violation assessments.

Once the regulatee has been brought under an order, Section 413 ensures that failing to meet any of its deadlines is not economically attractive.

Encouraging prompt compliance in this manner will allow the Department (1) to avoid much of the substantial administrative costs caused by uncooperative regulatees, and (2) to cut the average length of time a case remains pending before the Unit.

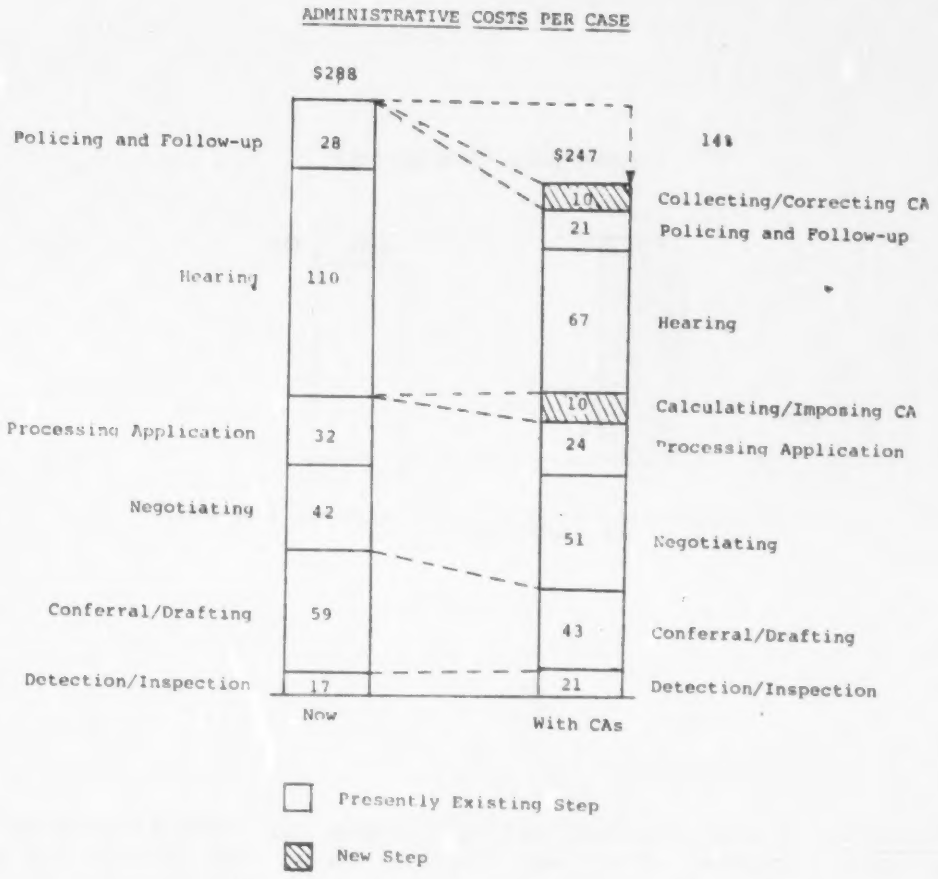
CIVIL ASSESSMENTS WILL CUT ADMINISTRATIVE COSTS 14 PERCENT IN THE TYPICAL CASE.



Source: Interviews with Unit personnel, time logs, and simulations

DISCUSSION: These figures reflect costs per case that requires enforcement action. They say nothing about the effect the presence of an effective enforcement system should have on the behavior of prospective fillers before they fill. A CEP study of the effect of strengthening enforcement in analogous regulatory settings revealed that voluntary compliance with the standards being enforced increased sharply. Specifically, the number of persons not in compliance dropped 72 percent on average after enforcement was toughened. If the Water Resources Unit's caseload dropped 72 percent, its average annual cost of handling commercial and institutional fill cases would be cut 76 percent. If voluntary compliance occurs at only half the rate the CEP study predicts, that is, if only 36 percent, the Unit's average annual caseload cost will still be cut 55 percent. Even if no increase in voluntary compliance takes place as a result of the new enforcement tool, the Unit's average annual caseload cost will drop 14 percent.

CUTTING THE NUMBER OF HEARINGS CONTRIBUTES IMPORTANTLY TO THESE COST SAVINGS.

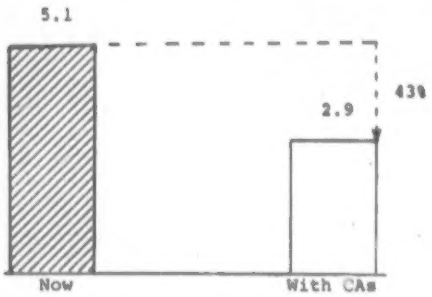


DISCUSSION: The Department's ability to bargain away civil assessment liability in exchange for consent agreements should reduce the number of cases with hearings. Also, since the Department will no longer have to use the permit process as a jawboning device, it will accept permit applications less frequently, and thus spend less time processing applications.

The major steps in processing a case under the civil assessment system are similar to present procedures; and the costs of calculating, imposing, correcting and collecting civil assessments are quite limited.

CIVIL ASSESSMENTS WILL ALSO CUT THE TIME FROM DETECTION TO DEPARTMENT DISPOSITION BY 43 PERCENT PER CASE.

Processing Time Per Case



Source: Water Resources Permit and Violation Files, interviews with Unit personnel

DISCUSSION: Cutting the time that elapses between detection and final Department action is especially important in cases involving illegal filling along the coast. If a fill is not removed within 3 months after placement, the possibility of restoring original bottom conditions declines markedly.

CHAPTER II

THE CEASE AND DESIST ORDER

PRESENT PROCEDURES

Cease and Desist Orders are effective emergency measures. Of the 5 Cease and Desist Orders the Inland Wetlands Section issued in 1974, 4 were obeyed immediately, and the fifth led to an injunction against a regulatee who continued to fill. (No Cease and Desist Orders were issued to stop illegal coastal filling.)

However, Cease and Desist Orders have severely limited usefulness. They are applied only in a small number of emergency cases where an activity likely to cause irreparable harm must be stopped at once. Anyone caught in the act of coastal filling might fit this description. But even the Cease and Desist Order probably would not require removal of what had already been placed.

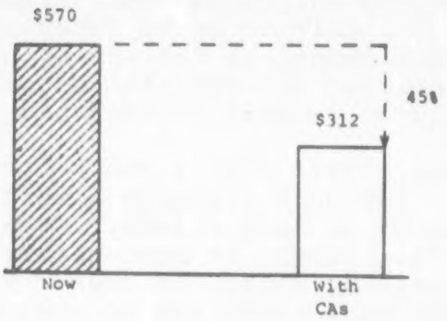
Very few Cease and Desist Orders can be issued for another, very concrete reason: the Unit can only afford the cost and disruption of a small number of such orders. When the Department issues a Cease and Desist Order, it must gather its facts together and hold a hearing within 10 days. This requires the small staff to drop its other work and scramble to meet this emergency deadline. The costs are too great to be incurred often.

CIVIL ASSESSMENTS

In those few cases where issuing an Order to Cease and Desist is both applicable and desirable, being able to impose civil assessment liability on violators will make such cases far less expensive. Regulatees will be far more likely to agree to postpone or drop the hearing when they know that (1) delaying coming into compliance will not yield economic benefits and (2) the Department may be willing to bargain away all or part of their civil assessment liability under Regulation 22a-6b-411 and 412, in order to obtain their cooperation and a final enforceable commitment to prompt remedial action.

CIVIL ASSESSMENTS WILL REDUCE THE COST OF CEASE AND DESIST ORDERS BY 45 PERCENT.

Administrative Costs Per Case



DISCUSSION: Again, this 45% figure assumes a constant caseload. If, as expected, the number of illegal fillers drops as a result of an effective enforcement system, the number of cases requiring Cease and Desist Orders should decrease as well. The Department may, of course, choose to use some of the staff resources this freed to issue and process other Cease and Desist Orders.

ADDENDUM

METHODOLOGY AND DETAILED COST ESTIMATES

ADDENDUM

METHODOLOGY AND DETAILED COST ESTIMATES

This Addendum explains how the summary administrative cost information used in the last two Chapters was obtained. It begins with a brief summary of the methodology used. It then spells out both the existing enforcement process and the proposed civil assessment process in detail - the flow of steps, a brief description of each and estimates of how much time (and therefore cost) each requires.

METHODOLOGY

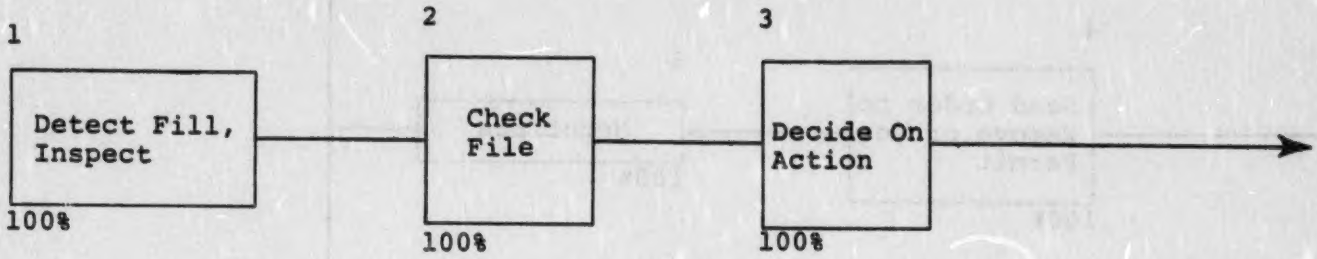
The CEP study of Administrative Costs for Water Resources began by observing and interviewing members of the Water Resources staff as they went about their enforcement duties. Staff members were asked to describe what takes place during a typical case where an illegal fill is detected: what steps are taken, who takes them, how long they take, and in what percentage of cases do they occur. With this information, and with a knowledge of the salary and fringe rates of the various staff members, it was possible to calculate the cost of each step in the enforcement process and the Department's average cost per enforcement case. Similarly, in calculating the average amount of lag time in the typical enforcement case, Water Resource's records and personnel were consulted to determine the average number of days that elapse between various steps in the enforcement process.

Since the civil assessment enforcement process is modeled after and designed to fit closely with existing Water Resources enforcement procedures, much of the information on the present system was directly applicable. For steps which do not exist presently, estimates of times and delays were made by analogy to steps that were somewhat similiar, or, when these were lacking, by actual simulation.

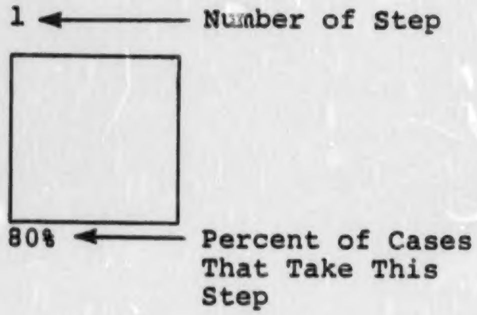
The detailed flow charts, step descriptions and step by step cost estimates that follow are the basis of the earlier assertions about the cost savings in the Order to Remove or Get a Permit process that will result from employing civil assessments. Multiplying the costs per case (found in the step by step breakdowns) by the percentage of cases in which a particular step occurs (found in the flow charts) and then adding them will yield the average cost per case figures presented in the bar graph on page VI-5. The flow charts, with their accompanying step descriptions, times, and percentages, will allow the reader to follow through the analysis behind the summary data.

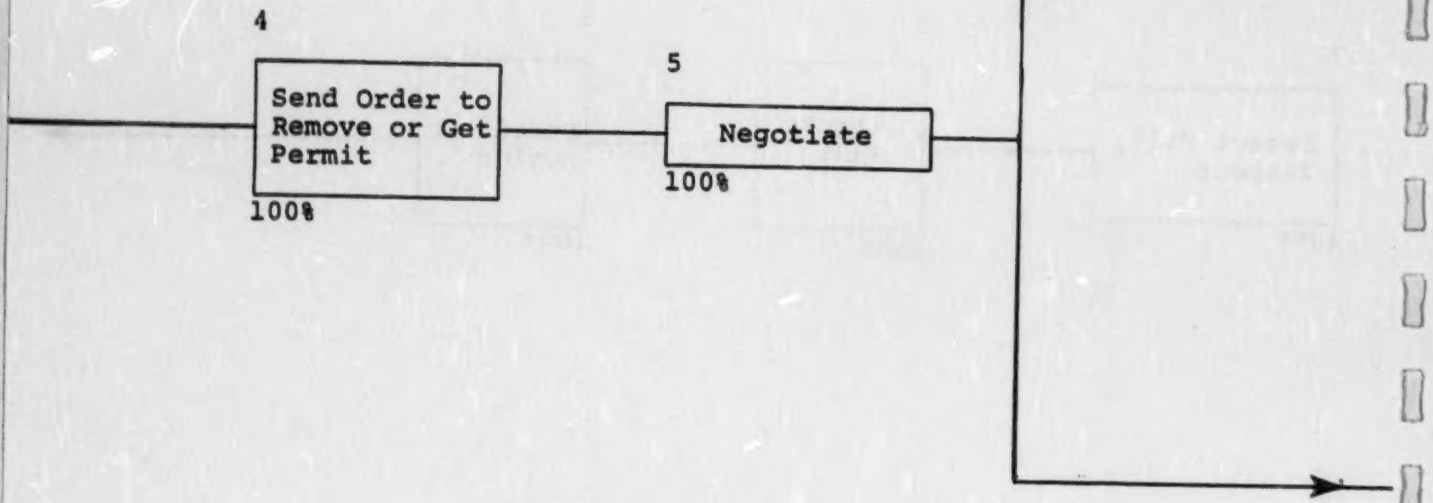
One may reasonably be skeptical about the certainty of an assertion that "Step X costs $23.13" or "Person Y spends 1/12 of a person/hour on Step 2." Clearly, times and costs, and even the staff members involved in different steps, will vary from case to case. The present enforcement process is not as cut-and-dried as it is presented below, nor will the civil assessment process be when it is in operation. Nevertheless, every effort has been made to be as accurate as possible in the descriptions, times, costs and percentages that follow, and the similarities of the two systems under examination should ensure that most inaccuracies in estimation will cancel each other out.

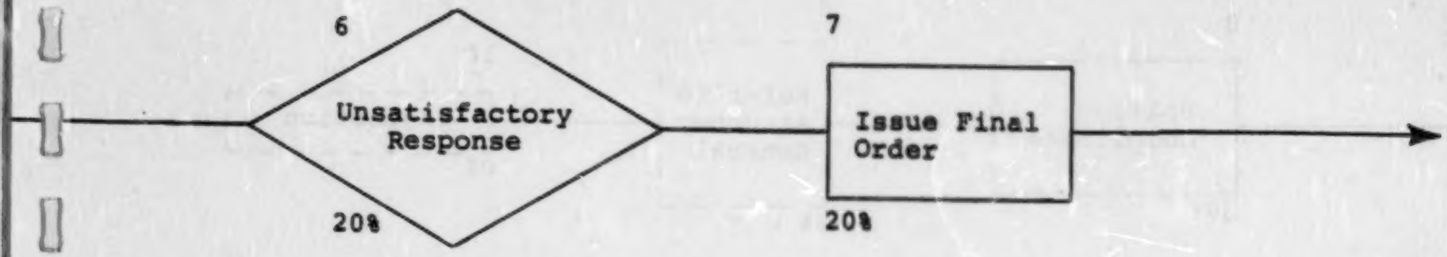
Present Enforcement Procedure

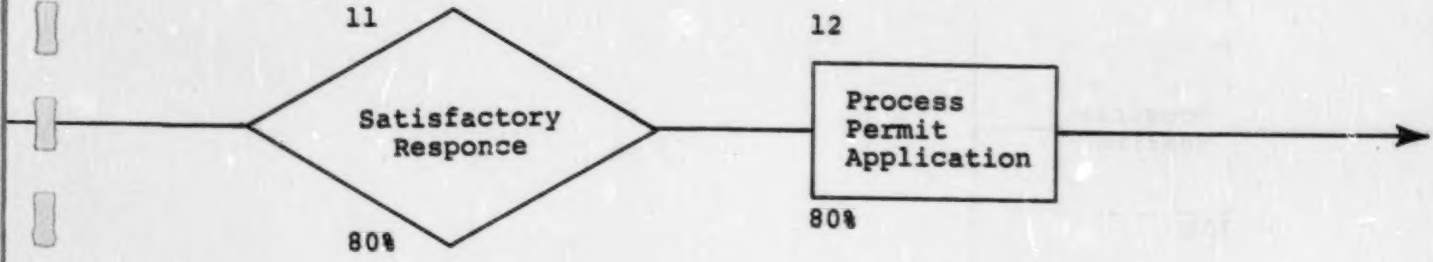

1
Detect Fill, Inspect
100%
2
Check File
100%
3
Decide On Action
100%

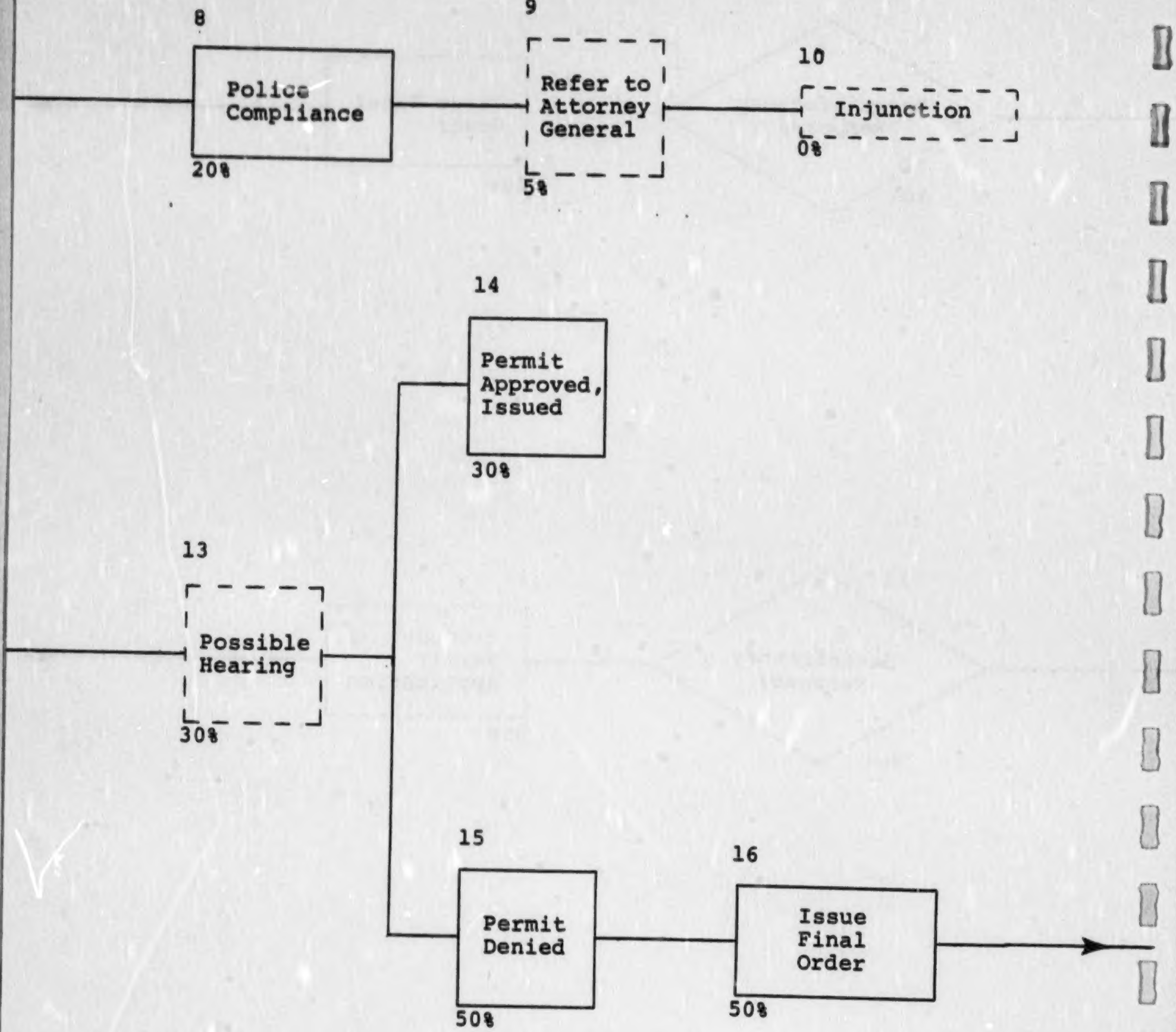
Key:

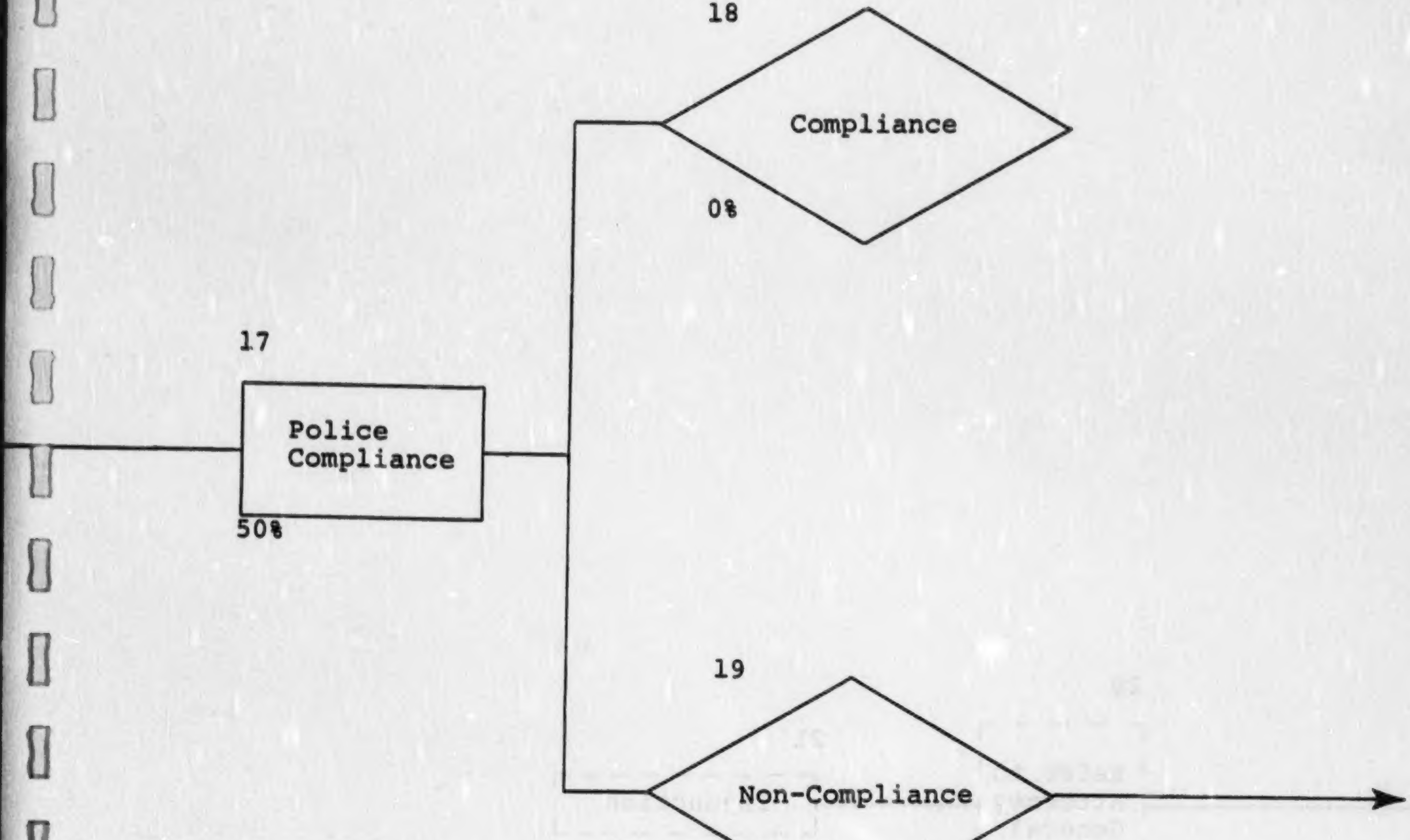

1
Number of Step
80%
Percent of Cases That Take This Step

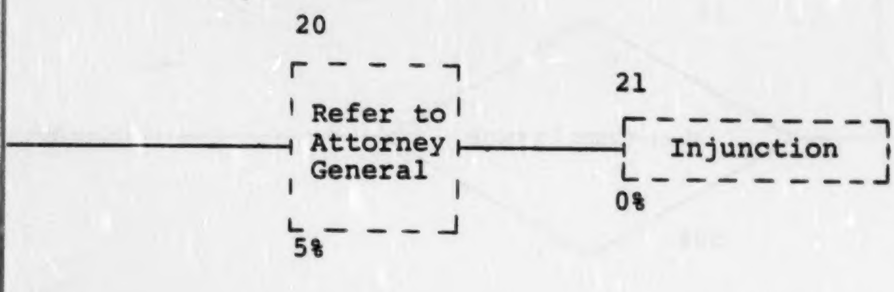

4
Send Order to Remove or Get Permit
100%
5
Negotiate
100%


6
Unsatisfactory Response
20%
7
Issue Final Order
20%


11
Satisfactory Responce
80%
12
Process Permit Application
80%


8
Police Compliance
20%
9
Refer to Attorney General
5%
10
Injunction
0%
14
Permit Approved, Issued
30%
13
Possible Hearing
30%
15
Permit Denied
50%
16
Issue Final Order
50%


18
Compliance
0%
17
Police Compliance
50%
19
Non-Compliance
50%


20
Refer to Attorney General
5%
21
Injunction
0%

STEP-BY-STEP BREAKDOWN OF PRESENT ADMINISTRATIVE COSTS

THE ORDER TO REMOVE OR GET A PERMIT PROCESS IN WATER RESOURCES

STEP	DESCRIPTION AND TIMES (AVERAGE)		COSTS PER CASE (including fringe benefits and indirect costs)
1.	30% of all reported violations are found by Department Field Inspectors while working on other cases. When this happens, the Inspector will get out of his car and briefly examine the fill site, note any significant characteristics and (probably) take a photograph. The other 70% are initially reported to the DEP by a citizen's phone call. An Inspector speaks to the caller, and writes down any relevant information. Within a few days, the Inspector will visit the site. More cost is incurred in citizen-detected cases, since the Inspector must speak on the phone, sign out a State car, and drive to and from the fill site.		
	TIMES: Field Inspector	2 1/12 Person Hours (average of Field Inspector detection and citizen complaint)	$17.23
2.	The Inspector must check the files to see if a permit has been issued for the fill.		
	TIMES: Field Inspector	1/4 P.H.	$ 2.07
3.	If the Inspector detects a bona fide violation, a meeting will take place at which an Inspector, the Director and the Deputy Director will be present. The Inspector who has visited the site will explain the violation, and a decision will be reached on how to proceed. The meeting should last about 20 minutes.		
	TIMES: Field Inspector	1/3 P.H.	$ 2.76
	Director	1/3 P.H.	4.94
	Deputy Director	1/3 P.H.	4.50
	Total	1 P.H.	$12.20

STEP	DESCRIPTION AND TIMES (AVERAGE)	COSTS PER CASE

4. The Department sends the violator a Notice of Violation, generally giving him 30 days to remove the fill or get a permit for it, and threatening action by the Attorney General if the violator does not come into compliance.

TIMES:	Field Inspector	1/4 P.H.	$ 2.07
	Secretary	1/2 P.H.	2.70
	Total	3/4 P.H.	$ 4.77

5. A variety of means are employed in attempting to secure compliance, including phone calls, follow-up letters, and visits to the regulatee. The figure below is a conservative estimate for the average time consumed in these informal proceedings.

TIMES:	Field Inspector	5 P.H.	$41.35

6. The violator refuses to apply for a permit.

7. The Director, Deputy Director and Field Inspector meet to review the case and agree on the content of the Final Order. The Deputy Director then writes the order, which is typed by a Secretary, proofed by the Deputy Director, and then corrected and sent certified mail by the Secretary.

TIMES:	Director	1/2 P.H.	$ 7.42
	Deputy Director	3 P.H.	40.38
	Field Inspector	1/2 P.H.	4.14
	Secretary	1 P.H.	5.40
	Total	5 P.H.	$57.34

8. Policing procedures include two trips to the site by one Inspector. A meeting with the violator will often take place during this inspection, lasting about one-half hour. The total time required of the Inspector is highly variable, and depends chiefly on driving time. A letter to the violator follows each trip to the site by the Inspector, and a copy of this is kept on file as a record of the action taken by the Inspector.

TIMES:	Field Inspector	4 P.H.	$33.06
	Secretary	1 P.H.	5.40
	Total	5 P.H.	$38.46

STEP DESCRIPTION AND TIMES (AVERAGE) **COSTS PER CASE**

9. A Field Inspector will bring the file of the case to the Attorney General's Office and explain the matter. Any updates on the case will be forwarded to the A.G. as well.

TIMES:			
TIMES:	Field Inspector	1 P.H.	$ 8.27

10. No work is required of the Water Resources Unit in obtaining an injunction.

11. The violator agrees to apply for a permit.

12. A permit application is reviewed initially by the Deputy Director, and then by a Field Inspector. A Secretary sends out notices of the application to interested parties. A Hearing may be held; see the description of Step 13 below. Finally, at a meeting attended by the Director, Deputy Director and Field Inspector, a decision will be made to grant or deny a permit.

TIMES:	Director	1/3 P.H.	$ 4.95
	Deputy Director	2/3 P.H.	8.97
	Field Inspector	1 1/3 P.H.	11.03
	Secretary	2 P.H.	10.80
	Total	4 1/3 P.H.	$35.75

13. Hearings take place in about 30% of the cases presently. A day must be spent at the outset by a Secretary to send out hearing notices to interested parties, arrange a room for the hearing, and reserve recording equipment. The hearing itself will be attended by the Director, the Deputy Director (one of whom will act as Hearing Examiner), a Field Inspector and a Secretary, who records the hearing. The hearing dictabelt will be transcribed by a Secretary, and the transcript checked by an Engineer-Geologist in Coastal Wetlands. The Hearing Examiner will then write a report on the hearing, which will be distributed to interested parties by a Secretary.

TIMES:	Director	4 P.H.	$ 59.36
	Deputy Director	4 P.H.	53.84
	Director/Dep. Dir. (Hearing Report)	6 P.H.	84.90
	Engineer-Geologist	5 P.H.	38.95
	Field Inspector	4 P.H.	33.08
	Secretary	18 P.H.	97.20
	Total	41 P.H.	$367.33

STEP	DESCRIPTION AND TIMES (AVERAGE)		COSTS PER CASE
14.	If the permit application is approved the permit will be prepared by a Secretary with the assistance of a Field Inspector, who will supply information for the Secretary to include in the standard permit form. It is then sent by the Secretary to the regulatee by certified mail.		
	TIMES: Field Inspector	1/2 P.H.	$ 4.14
	Secretary	1 1/2 P.H.	8.10
	Total	2 P.H.	$12.24
15.	If the application is denied, the regulatee will be informed of this decision when he received the Final Order of the Department (see Step 16, below).		
16.	Analogous to Step 7, above.		
	TIMES: Total	5 P.H.	$57.34
17.	Analogous to Step 8, above.		
	TIMES: Total	5 P.H.	$38.46
18.	The regulatee complies with the Final Order.		
19.	The regulatee refuses to comply with the Final Order.		
20.	Analogous to Step 9, above.		
	TIMES: Total	1 P.H.	$ 8.27
21.	Analogous to Step 10, above.		

STEP-BY-STEP BREAKDOWN OF ADMINISTRATIVE COSTS OF COASTAL ENFORCEMENT UNDER THE PROPOSED CIVIL ASSESSMENT REGULATIONS

STEP	DESCRIPTION AND TIMES (AVERAGE)			COSTS PER CASE (including fringe benefits and indirect costs)
1.	Same as present Step 1, except that Inspector will spend approximately one-half hour extra per case pacing off the dimensions of the fill.			
	TIMES:	Field Inspector	2 7/12 Person Hours	$21.36
2.	The Inspector must check the files to see if a permit has been issued to the regulatee in question.			
	TIMES:	Field Inspector	1/4 Person Hours	$ 2.07
3.	If the inspector detects a violation, a meeting will take place at which an inspector, the Director and the Deputy Director will be present. The inspector who has visited the site will explain the violation, and a decision will be reached on how to proceed. The meeting should last about 20 minutes.			
	TIMES;	Field Inspector	1/3 P.H.	$ 2.76
		Director	1/3 P.H.	4.94
		Deputy Director	1/3 P.H.	4.50
		Total	1 P.H.	$12.20
4.	In cases where both the 411 and 412 assessments will be imposed, the Field Inspector will call the Department's Land Acquisition Unit to schedule an appraisal of the fill site. Some time before the scheduled date of this appraisal, the Field Inspector will send Land Acquisition a copy of the information he obtained during his inspection, including information concerning the boundaries of the illegal fill. These copies will be made and sent by a Secretary.			

STEP **DESCRIPTION AND TIMES (AVERAGE)** **COSTS PER CASE**

TIMES:	Field Inspector	1/2 P.H.	$ 4.14
	Secretary	1/4 P.H.	1.35
	Total	3/4 P.H.	$ 5.49

5. When the appraisal is completed, Land Acquisition will send the Field Inspector their estimate of the fill site's fair market value. The Field Inspector will read this estimate and add it to the case file.

TIMES:	Field Inspector	1/12 P.H.	$ .69

6. The Field Inspector, using a hand calculator, will plug information into the civil assessment formula to find the regulatee's liability for pre-detection benefit and his monthly civil assessment.

TIMES:	Field Inspector	1/2 P.H.	$ 4.14

7. The Field Inspector will instruct a Secretary to fill out a form Notice of Violation for the 411 assessment. When the Secretary finishes doing this, it will be presented to the Director for his signature. The Secretary will then send the Notice to the regulatee by certified mail.

TIMES:	Director	1/12 P.H.	$ 1.25
	Field Inspector	1/12 P.H.	.69
	Secretary	1/3 P.H.	1.80
	Total	1/2 P.H.	$ 3.74

8. If the 412 assessment is to be imposed, its Notice of Violation will be sent together with that of the 411 assessment. Each of the three persons involved in the previous step will spend approximately 5 minutes extra per case, the Field Inspector in instruction, the Secretary in filling out the additional form, and the Director in approving and signing the additional form.

STEP DESCRIPTION AND TIMES (AVERAGE) COSTS PER CASE

TIMES:	Director	1/12 P.H.	$ 1.25
	Field Inspector	1/12 P.H.	.69
	Secretary	1/12 P.H.	.45
	Total	1/4 P.H.	$ 2.39

9. The Department's purpose in the Negotiations is to get the regulatee to come into compliance or to come under a consent order. The regulatee will probably first call the Department upon receiving his Notice(s) of Violation. During this call he will talk to the Field Inspector assigned to the case, who will explain the regulatee's liability and obligations to him, and probably arrange a meeting with the regulatee and other members of the Unit staff. At this meeting, which should last about 1 1/2 hours, the regulatee may wish to discuss a number of topics, including the existence of a violation, the amount of his civil assessments, and the steps he can take to come into compliance and minimize his liability. The time and cost estimates below assume that such a meeting takes place in 90% of all cases.

TIMES:	Director	1 1/3 P.H.	$19.74
	Deputy Director	1 1/3 P.H.	17.90
	Field Inspector	1 2/3 P.H.	13.81
	Total	4 1/3 P.H.	$51.45

10. In cases where the Department decides not to impose the 412 assessment, e.g., when it desires only that the regulatee obtain a permit, not that he remove or modify the fill, only the 411 assessment will be imposed, and the Department will process the regulatee's permit application. This process is analogous to present steps 12-14.

Present step

TIMES:	(12)	Total	4 1/3 P.H.	$ 35.75
	(13)	Total	12 1/3 P.H.	110.20
			(30% of 41)	(30% of $367.33)
	(14)	Total	2 P.H.	12.24
		Total	18 2/3 P.H.	$158.19

STEP **DESCRIPTION AND TIMES (AVERAGE)** **COSTS PER CASE**

11. If the regulatee is willing to agree to a Consent Order, the Order will be drafted by the Deputy Director, typed by a Secretary, reviewed and corrected by the Deputy Director, retyped by the Secretary, reviewed by the Director and Field Inspector, and sent to the regulatee, certified mail by the Secretary. When the agreement comes back signed by the regulatee it will be filed by the Secretary.

TIMES:	Director	1/4 P.H.	$ 3.71
	Deputy Director	3 P.H.	40.38
	Field Inspector	1/4 P.H.	2.07
	Secretary	2 P.H.	10.80
	Total	5 1/2 P.H.	$56.96

12. Same as present Step 8.

TIMES:	Field Inspector	4 P.H.	$33.06
	Secretary	1 P.H.	5.40
	Total	5 P.H.	$38.46

13. The regulatee either fulfills the terms of his Consent Order or now possesses a valid permit.

14. Any assessment(s) owed to the Department which have not yet been collected or mitigated will be mailed to the Water Resources Unit by the regulatee. The check will then be deposited in the State bank account by a Secretary, after it is logged and shown to the Deputy Director.

TIMES:	Deputy Director	1/12 P.H.	$1.12
	Secretary	1/2 P.H.	2.70
	Total	7/12 P.H.	$3.82

15. When a hearing is held, a day must be spent at the outset by a Secretary to send out hearing notices to interested parties, arrange a room for the hearing, and reserve recording equipment. The hearing itself will be attended by the Director, the Deputy Director (one of whom will act as Hearing Examiner), a Field Inspector and a Secretary, who records the hearing. The hearing dictabelt will be transcribed by a Secretary, and the transcript checked by an Engineer-Geologist in Coastal Wetlands. The Hearing Examiner will then write a report on the hearing, which will be distributed to interested parties by a Secretary.

STEP DESCRIPTION AND TIMES (AVERAGE) COSTS PER CASE

TIMES:	Director	4 P.H.	$ 59.36
	Deputy Director	4 P.H.	53.84
	Director/Dep. Dir. (Hearing Report)	6 P.H.	84.90
	Engineer-Geologist	5 P.H.	38.95
	Field Inspector	4 P.H.	33.08
	Secretary	18.P.H.	97.20
	Total	41.P.H.	$367.33

16. No use of staff time is anticipated in Court Appeals of the findings of the Hearing Examiner.

17. If the Hearing Examiner believes that mitigation is warranted he shall mitigate the civil assessment to a suitable level. He will include his reasons for mitigating the assessment in his hearing report (see Step 15). The regulatee will receive written notice of the mitigation of the assessment on a form filled out by a Secretary and sent to him by certified mail.

TIMES:	Director/ Deputy Director	1/12 P.H.	$1.27
	Secretary	1/3 P.H.	1.80
	Total	5/12 P.H.	$3.07

18 Same as present Step 7.

TIMES:	Director	1/2 P.H.	$ 7.42
	Deputy Director	3 P.H.	40.38
	Field Inspector	1/2 P.H.	4.14
	Secretary	1 P.H.	5.40
	Total	5 P.H.	$57.34

19. Same as Step 12.

TIMES:	Field Inspector	4 P.H.	$33.06
	Secretary	1 P.H.	5.40
	Total	5 P.H.	$38.46

20. The regulatee fails to comply with the terms of the Final Order.

21. The Director will instruct a Secretary to fill out a form Notice of Violation of the Final Order to the regulatee, including a monthly 413 civil assessment amount, which will be the same as the monthly civil

STEP DESCRIPTION AND TIMES (AVERAGE) COSTS PER CASE

assessment under 412. The Secretary will then give the notice to the Director for his approval and will send it to the regulatee by certified mail when he returns it.

TIMES:	Director	1/6 P.H.	$2.47
	Secretary	1/2 P.H.	2.70
	Total	2/3 P.H.	$5.17

22. Only one trip and one memo is required at this step, unlike Step 19.

TIMES:	Field Inspector	2 P.H.	$16.54
	Secretary	1/2 P.H.	2.70
	Total	2 1/2 P.H.	$19.24

23. The regulatee remains in non-compliance despite the 413 assessment.

24. A Field Inspector will bring the file of the case to the Attorney General's Office and explain the matter. Any updates on the case will be forwarded to the Attorney General as well.

TIMES:	Field Inspector	1 P.H.	$8.27

25. No work is required of the Water Resources Unit in obtaining an injunction.

26. The regulatee fails to comply with the terms of his consent order.

27. Same as Step 21.

TIMES:	Director	1/6 P.H.	$2.47
	Secretary	1/2 P.H.	2.70
	Total	2/3 P.H.	$5.17

28. Same as Step 15.

TIMES:	Director	4 P.H.	$59.36
	Deputy Director	4 P.H.	53.84
	Director/Dep. Dir. (Hearing Report)	6 P.H.	84.90
	Engineer-Geologist	5 P.H.	38.95
	Field Inspector	4 P.H.	33.08
	Secretary	18 P.H.	97.20
	Total	41 P.H.	$367.33

29. No use of staff time is anticipated in Court Appeals of the findings of the Hearing Examiner.

STEP DESCRIPTION AND TIMES (AVERAGE) COST PER CASE

30. Same as Step 17.

TIMES:			
	Director/Dep. Dir.	1/12 P.H.	$1.27
	Secretary	1/3 P.H.	1.80
	Total	5/12 P.H.	$3.07

31. Same as Step 22.

TIMES:			
	Field Inspector	2 P.H.	$16.54
	Secretary	1/2 P.H.	2.70
	Total	2 1/2 P.H.	$19.24

32. The regulatee remains in non-complaince despite the 413 assessment.

33. Same as Step 24.

TIMES:			
	Field Inspector	1 P.H.	$8.27

34. No work is required of the Water Resources Unit in obtaining an injunction.

35. The regulatee complies with the terms of the Final Order.

36. Same as Step 14.

TIMES:			
	Deputy Director	1/12 P.H.	$1.12
	Secretary	1/2 P.H.	2.70
	Total	7/12 P.H.	$3.82

37. If, after a regulatee has come into compliance, he believes that the amount of his civil assessments overestimated his benefits from being in non-compliance, he may ask the Commissioner to correct his assessment. A meeting will take place which the regulatee, a Field Inspector and the Director will attend. At this meeting, the regulatee will present evidence to justify his claim for correction. If in the opinion of the Director, correction is called for, a refund will be made to the regulatee with interest (see Step 40).

TIMES:			
	Director	1 1/2 P.H.	$22.26
	Field Inspector	1 1/2 P.H.	12.41
	Total	3 P.H.	$34.67

STEP **DESCRITPION AND TIMES (AVERAGE)** **COST PER CASE**

38. If the regulatee is dissatisfied with the result of the correction negotiation, he may ask for a correction Hearing. At that Hearing, he will make a formal presentation of his claim for a lowered assessment. Either the Director or the Deputy Director will serve as the Hearing Examiner.

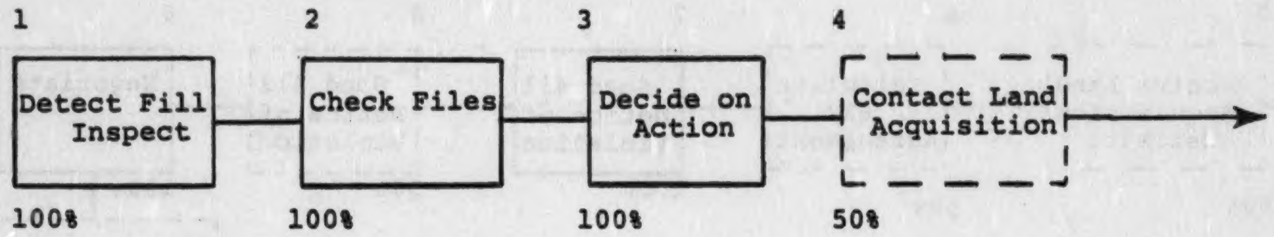
TIMES:			
	Director/Dep. Dir.	1 1/2 P.H.	$21.23
	Field Inspector	1 1/2 P.H.	12.41
	Total	3 P.H.	$33.64

39. No use of staff time is anticipated in court Appeals of the findings of the Hearing Examiner.

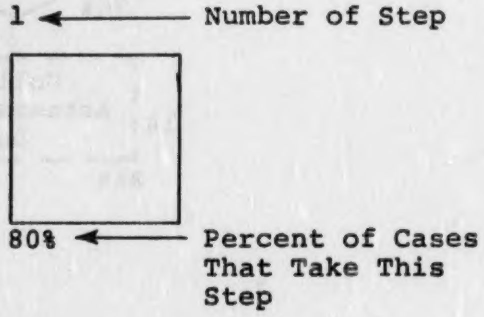
40. If a regulatee's claim for correction is upheld, correction and an appropriate refund will be made. An explanatory memorandum, written by the Deputy Director, typed by a Secretary, proofed by the Deputy Director, and reviewed and signed by the Director, will be sent to the Bureau of Administration to explain the reasons for making the refund to the regulatee.

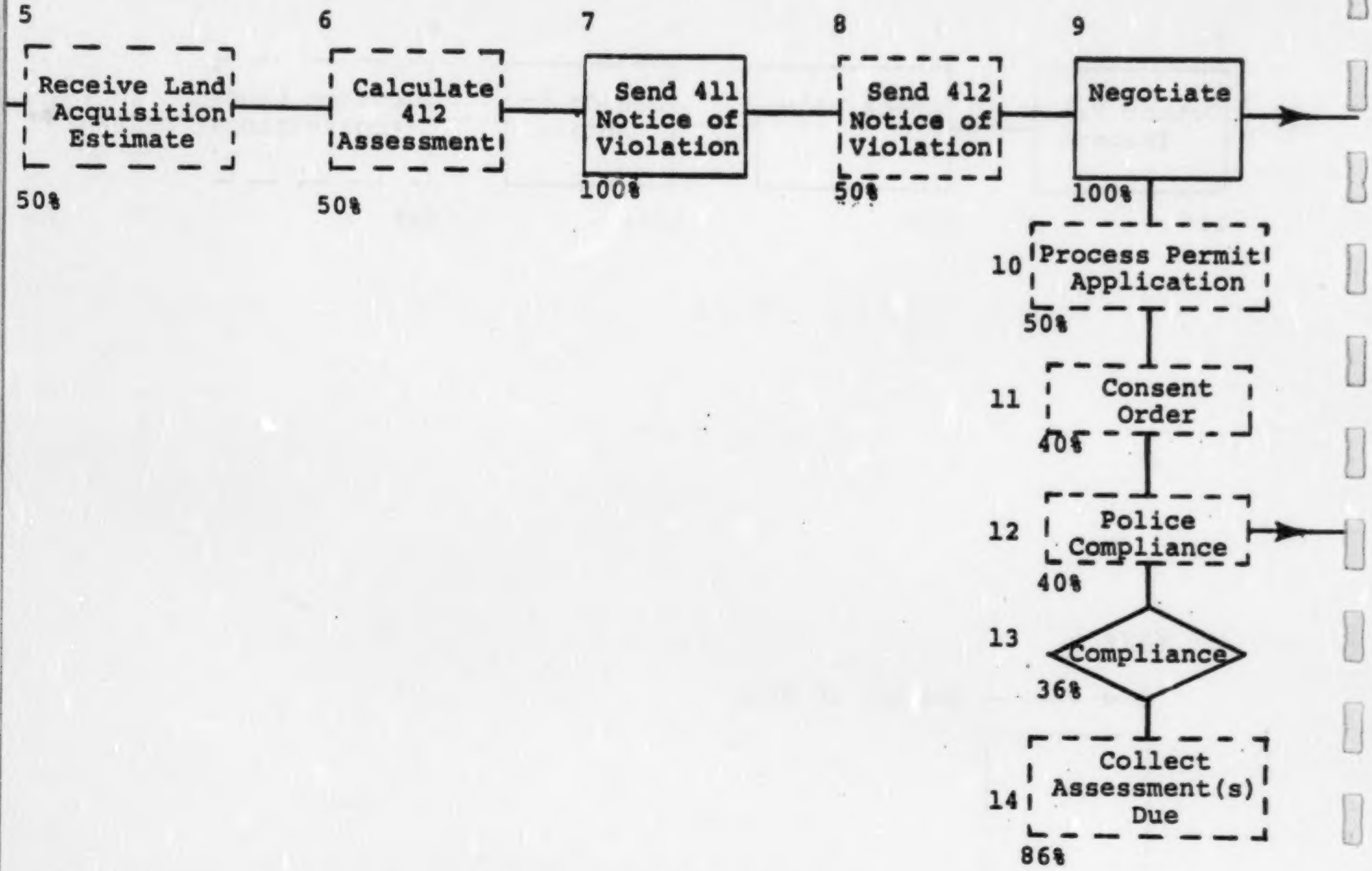
TIMES:			
	Director	1/4 P.H.	$ 3.71
	Deputy Director	3/4 P.H.	10.10
	Secretary	2/3 P.H.	3.60
	Total	1 2/3 P.H.	$17.41

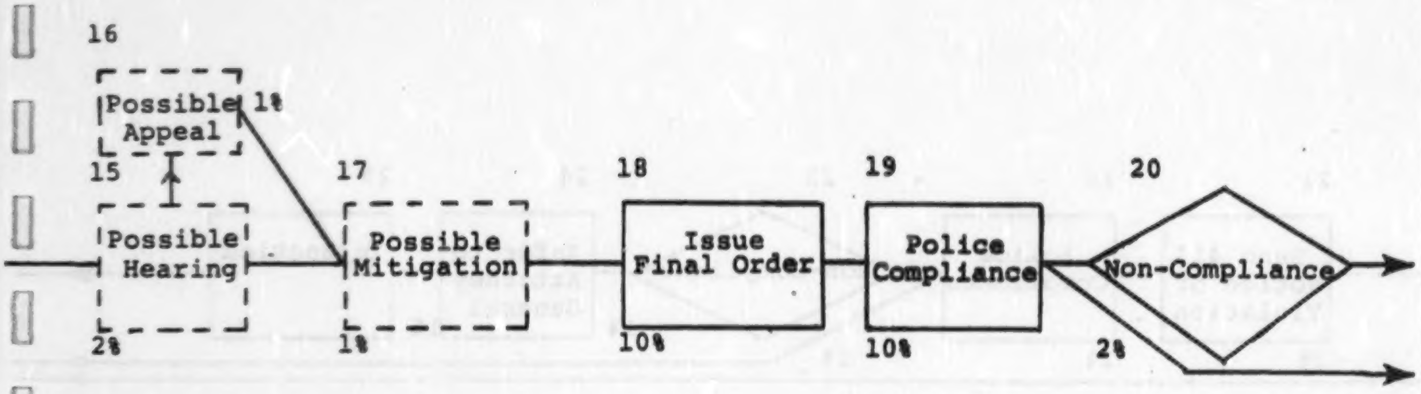
CIVIL ASSESMENT ENFORCEMENT PROCEEDURES

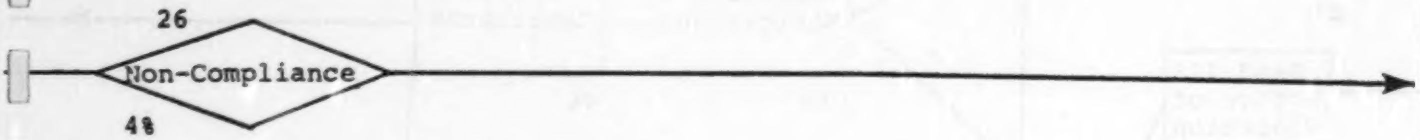

1
Detect Fill Inspect
100%
2
Check Files
100%
3
Decide on Action
100%
4
Contact Land Acquisition
50%

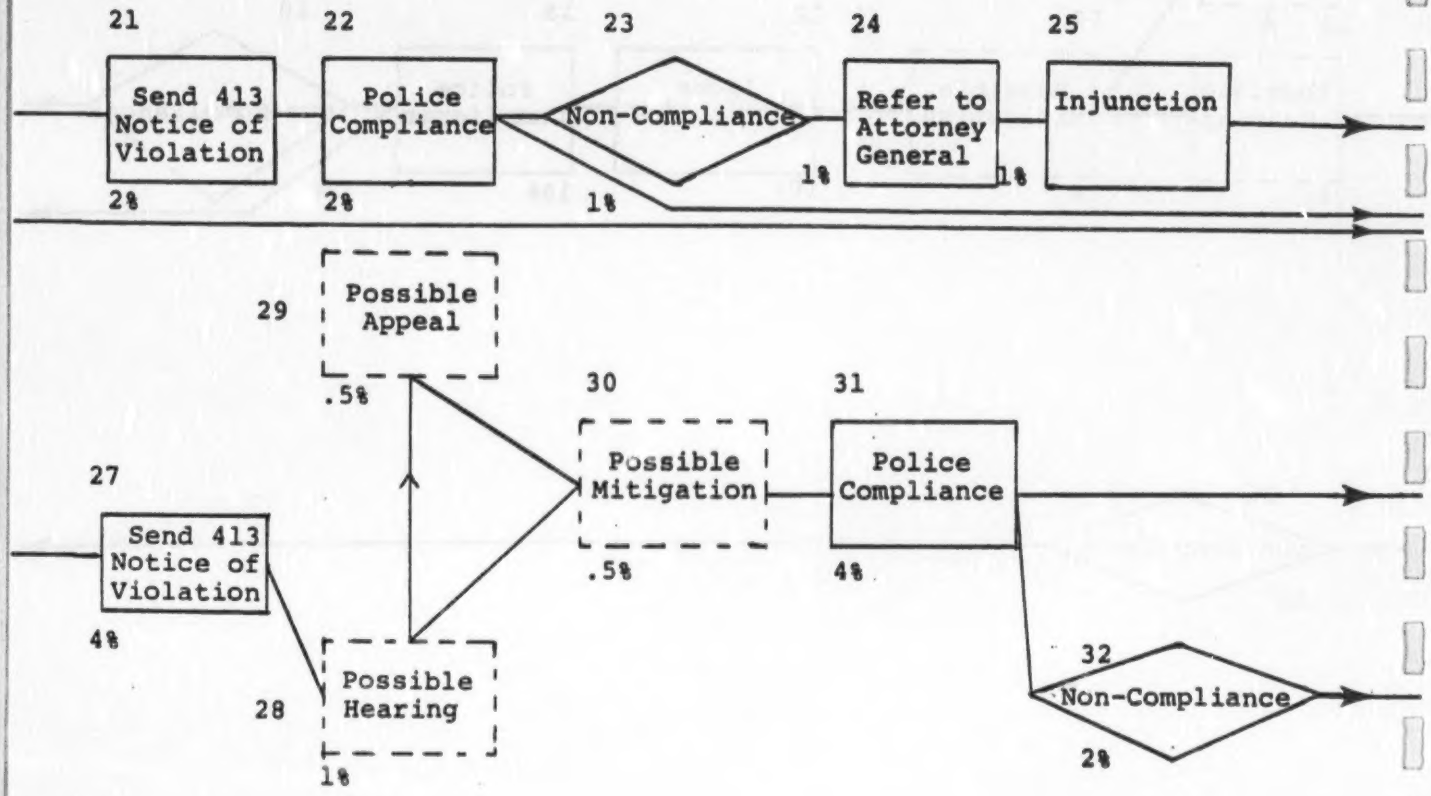
Key:

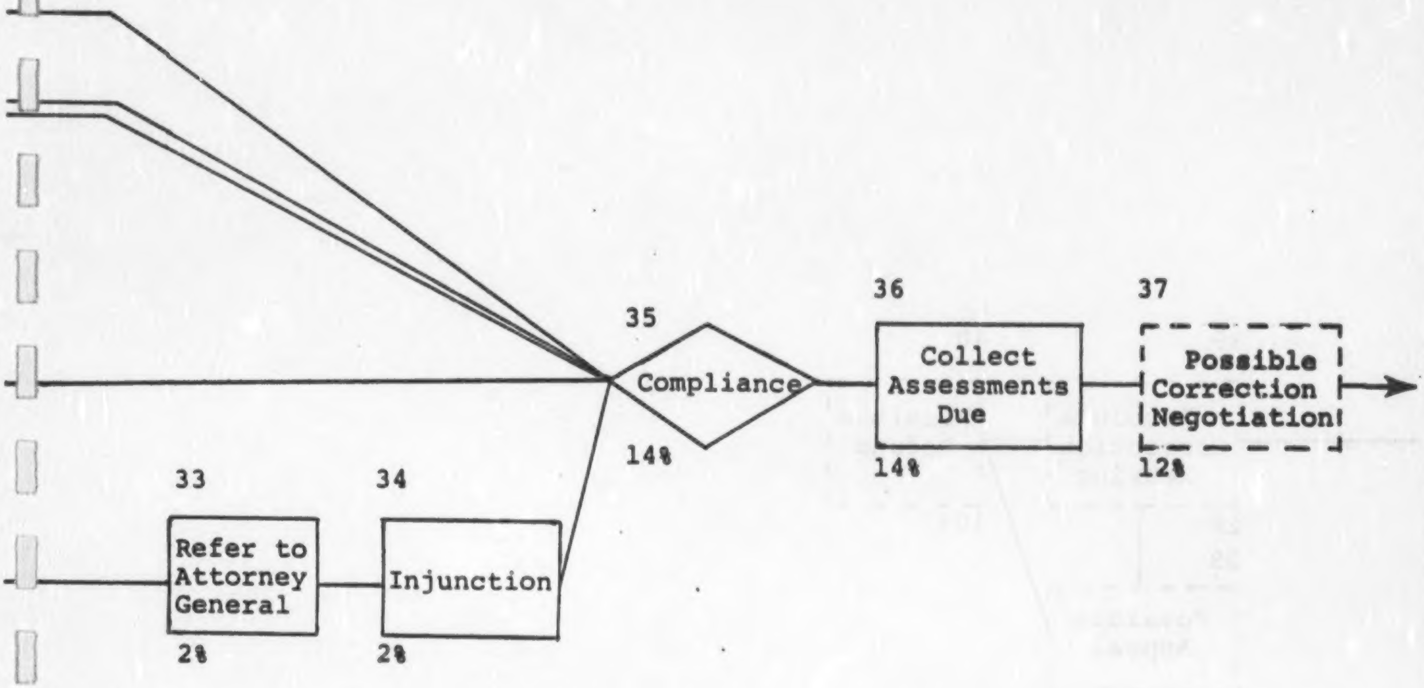

1
Number of Step
80%
Percent of Cases That Take This Step

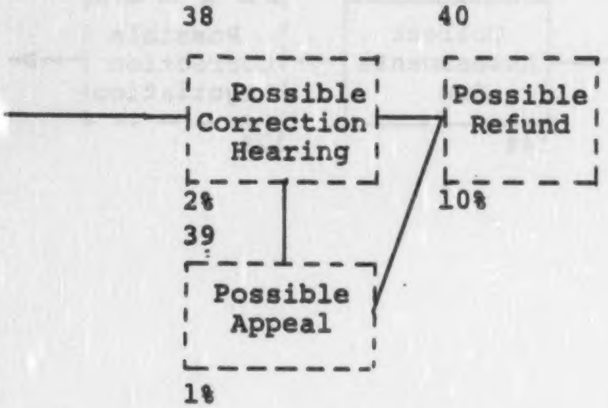

5
Receive Land Acquisition Estimate
50%
6
Calculate 412 Assessment
50%
7
Send 411 Notice of Violation
100%
8
Send 412 Notice of Violation
50%
9
Negotiate
100%
10
Process Permit Application
50%
11
Consent Order
40%
12
Police Compliance
40%
13
Compliance
36%
14
Collect Assessment(s) Due
86%


16
Possible Appeal
1%
15
Possible Hearing
2%
17
Possible Mitigation
1%
18
Issue Final Order
10%
19
Police Compliance
10%
20
Non-Compliance
2%


26
Non-Compliance
4%


21
Send 413 Notice of Violation
2%
22
Police Compliance
2%
23
Non-Compliance
1%
1%
24
Refer to Attorney General
1%
25
Injunction
29
Possible Appeal
.5%
27
Send 413 Notice of Violation
4%
28
Possible Hearing
1%
30
Possible Mitigation
.5%
31
Police Compliance
4%
32
Non-Compliance
2%


35
Compliance
14%
36
Collect Assessments Due
14%
37
Possible Correction Negotiation
12%
33
Refer to Attorney General
2%
34
Injunction
2%


38
Possible Correction Hearing
2%
40
Possible Refund
10%
39
Possible Appeal
1%